

出國報告（出國類別：訪問）

法國運動科學研究機構參訪報告

服務機關：國家科學及技術委員會人文及社會科學研究發展處

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派赴國家/地區：法國/巴黎

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摘 要

國科會人文處處長率精準運動科學研究專案計畫及擴大運科能量計畫執行團隊至法國國家體育運動表現科學研究院、法國巴黎經濟發展暨創新聯盟、巴黎第十二大學(UPEC)、索邦大學(Sorbonne University)、STATION F 新創基地等產學研機構進行訪問及學術研究交流，瞭解法國運動科學研究發展情形。

目 次

壹、參訪目的.....	1
貳、參訪過程與心得.....	2
參、結論與建議.....	12
附件	
一、訪團人員名單	
二、法國巴黎經濟發展暨創新聯盟簡報內容	
三、法國國家體育運動表現科學研究院簡報內容	
四、巴黎第十二大學簡報內容	

法國運動科學研究機構參訪報告

壹、參訪目的

一、緣起

體育即國力，如何以新世代的科技產品協助選手進行科學化訓練，已是各國運動科學家研究之首要課題。為落實總統體育發展政策，因應國際運動科學發展趨勢，國科會自 107 年起規劃推動 4 年期「精準運動科學研究專案計畫」(107-110 年)以優秀運動員為主體，瞭解其需求及協助解決選訓困境瓶頸，分別就運動科學訓練、體能恢復與傷害防治、技戰術分析等 3 大主軸研究，涵蓋 5 個運動項目(棒球、羽球、桌球、舉重及自行車)，透過運動科學跨領域整合研究，讓科技研發能量成為臺灣運動競技表現最強而有力的後盾。

110 年 11 月 30 日由科技辦公室邀集產官學研代表召開「台灣運動 X 科技產業策略會議」(SRB)，期藉由整合跨域資源，帶動臺灣運動科技產業發展及全民運動健康，以達到 2030 Sports Everywhere 之願景。依據會議共識，由國科會攜手經濟部、教育部、衛生福利部及數位發展部，共同規劃推動「運動科技應用與產業發展計畫」，以「強化基礎結構」、「擴大運科能量」、「推動數據治理」及「建構產業生態」4 分項主軸推動。其中「擴大運科能量」分項係國科會主責。國科會人文處及產學處分從運動科學研究、擴大運科研究能量及產學合作三大面向推動。人文處除賡續推動第 2 期「精準運動科學研究專案計畫」(112-115 年)，以卓越競技科學研究、運動健身科學研究、跨域產業生態研究及永續多元平等研究為主要議題，並啟動「擴大運動科學研究能量與成果橋接計畫」，橋接運科研究成果至產業界，將團隊研發之技術產品與企業單位等鏈結合作，致力於推升體育運動科學研究量能，以及提高臺灣運動產業經濟動能。

2024 年 7 月 26 日至 8 月 11 日夏季奧林匹克運動會於法國巴黎舉辦，也是巴黎時隔 100 年後再度獲得奧運會主辦權。為展現「卓越、友誼、尊重」的奧林匹克精神，也藉此促進地方經濟、宣傳城市魅力，實踐環境友善、社會公益及經濟發展，呈現多元、永續、生活化與國際化的運動文化等，部分奧運賽事安排在巴黎艾菲爾鐵塔前、戰神廣場、凡爾賽宮、巴黎大皇宮及協和廣場等名勝古蹟舉行，並同時舉行「文化奧運」，結合文化價值。法國在 2024 奧運中也獲得佳績，共計獲得 64 面獎牌(16 金 26 銀 22 銅)，世界排名第五¹，充分展現法國運動競技實力。

¹ 詳請參見巴黎奧運 Paris 2024 Olympics 網站，網頁 <https://olympics.com/en/paris-2024/medals>。

二、目的

為瞭解法國運動科學後勤支援和運動政策倡議的情形，並與當地學術研究機構交流及洽談合作研究等，由國科會人文處處長率精準運動科學研究專案計畫及擴大運科能量計畫執行團隊至法國巴黎學研機構進行訪問及學術研究交流(訪團人員名單如附件 1)。本次訪問法國運動科學學研機構的主要目的如下：

(一)瞭解法國運動科學後勤支援：瞭解法國在運動科學領域的最新技術、研究成果及後勤支援系統，以借鏡和應用於臺灣的相關研究與發展。

(二)促進學術交流與合作：與法國學術研究機構進行交流，分享台法雙方運動科研現況及成果，並探討未來可能的合作方向或議題。

(三)參訪運動產業研發中心：參訪 STATION F 新創基地、迪卡儂研發中心等機構，以瞭解法國推動新創企業及運動產業研發的策略及重點等。

(四)洽談合作研究協議：擬與法國學研機構洽談合作研究協議簽署事宜，以建立長期合作關係，推動台法雙方在運動科學領域的鏈結合作。

貳、參訪過程與心得

本次參訪行程自 113 年 10 月 6 日(日)至 10 月 13 日(日)，共計 8 天，向參訪機構介紹國科會、精準運動科學研究專案計畫及各研究團隊的研究重點，並於事前提供討論議題與提問，在有限參訪時間內盡可能地深入交流。

參訪單位包括法國國家體育運動表現科學研究院(INSEP)、法國巴黎經濟發展暨創新聯盟(Paris & Co)、巴黎第十二大學(UPEC)、索邦大學(Sorbonne University)、STATION F 新創基地、迪卡儂研發中心(BTWIN Village)、手球之家，以及巴黎聖日耳曼足球俱樂部—王子公園體育場(Paris Saint-Germain soccer Club)等。以下分別說明參訪各個產學研機構過程：

一、法國巴黎經濟發展暨創新聯盟

法國巴黎經濟發展暨創新聯盟(Paris & Co)成立於 1998 年，是法國巴黎最大的運動創新育成機構，致力於支持新創企業和促進創新，每年支援超過 500 家新創公司。Paris & Co 的營運經費來源包括政府部門補助、私人企業補助及新創企業收入。2023 年經費約 900 萬歐元，其中約 35%係來自政府部門補助。

本訪團抵達法國當天下午，在駐法科技組林靜怡組長及范瑋倫秘書陪同下，前往該機構與運動創新有關的平台「Le Tremplin」參訪，由該機構運動經理 Constant Capron 先生接待。首先由本訪團介紹國科會及精準運動科學研究專案各研究團隊研究內容及重點，接著由 Paris & Co 簡介該機構宗旨、服務項目與方式，以及目前營運狀

況。該機構運動新創自 2015 年迄今已提升 2 億歐元、創造 1000 個以上的工作機會，在 2023 年新創事業收益超過 3 千萬歐元(簡報內容請參見附件 2)。並帶領訪團成員參觀機構內部空間配置，包括各公司的獨立辦公區域、公用會議室、討論區等，由於涉及各新創公司之機密，故禁止拍攝內部辦公情形。此外，內部也設有運動休憩室，其中採用 APP 管理運動器材借用及歸還，除了操作程序簡便之外，也容易追蹤歸還及使用情形。(請參見圖 1-2)



二、迪卡儂 BTWIN Village 創新研發中心

迪卡儂集團(DECATHLON GROUPS)創立於 1976 年，為法國大型連鎖運動用品製造及販售的企業。在法國設立多個研發中心，本次參訪的創新研發中心(Decathlon Innovation Hub)係以自行車產品的開發和製造為主，內部包括先進的生產設備，可以進行小額的生產，並設有測試自行車及其零件耐久性、性能和安全測試的實驗室，以及對外開放的桌球桌、自行車波浪型坡道等運動設施、販賣自行車相關商品、提供輕食與遊樂的小型商場，兼具研發與運動休閒功能(請參見圖 3-10)。

首先，由 BTWIN Village 研發中心資深新創經理 Christophe HELIE 及 Edyta Molmy 引導訪團成員進入該中心，簡介迪卡儂集團的研發思維、策略及流程等，並與訪團成員交流意見；簡報後，訪團成員分成 2 組參觀研發中心內部，包括產品設計包括樣品製作的實作區域、檢測區域、以及國際身心研究中心(International Body & Mind Research Center)等。參訪心得如下：

1、重視團隊合作開發

迪卡儂 BTWIN Village 強調與各領域專家合作，每項專案都有工程師、設計師及產品經理 3 類人員參與，以 85 個運動項目 25 個製程矩陣式發展專案，專案參與人員從各自專業互助合作共同設計及開發產品。這樣的專案管理方式可以清楚明確的知道

商品研發過程需要的製程以及支援，避免開發過程中重複或疏漏。

2、鼓勵員工研究創新

研發中心設有許多專業的實驗室，其設備齊全，相較於一般大學的實驗室而言毫不遜色，研發人員可自由運用，蒐集、分析數據，以及驗證產品等。在各工作及測試區域中也留有小組討論的區域，方便專案小組集思廣益或修正流程。另外，經由舉辦創新競賽，發掘更多可生產上市的商品。

3、需求導向永續創新

迪卡儂研發中心以使用者需求導向研發創新商品，例如研發世界第一款手部人體工學的拳擊手套、瞬間減震運動鞋、乳癌手術後適用的運動內衣、可輕易開啟及收合的露營帳篷等。以一般民眾可負擔的價格，供應運動相關商品，降低運動門檻。不僅持續創新優化產品，以符合需求，更選用能降低對環境影響的材料。



圖 3：研發成果展示牆



圖 4：研發中心內設有桌球桌等運動設施



圖 5：實作區域(1)



圖 6：實作區域(2)



圖 7：實作區域(3)



圖 8：手套檢測室



圖 9：人體 3D 掃描系統



圖 10：Newton，協助檢測紡織品的人體模型

三、STATION F 新創基地

STATION F 由法國企業家 Xavier Niel 於 2017 年創立的，所在地原為舊巴黎貨運火車站，占地約 10,285 坪，經由內部空間重新設計及改造，翻轉為世界最大新創園區。吸引 Facebook、Microsoft 等科技產業進駐，以及法國知名品牌 LVMH、L'Oréal Paris 等產業進駐，該基地更容納超過 1,000 家新創企業。參訪心得簡述如下：

1、完善的創業支持系統

STATION F 不僅僅只是出租辦公空間，為協助新創企業在各個階段的發展，STATION F 基地內建立完整的創業生態系統，提供創業者從初期到成長期所需與人員招募及管理、產品開發及行銷、資金籌措等相關的專業指導，也有各種加速器、創投公司、法律和財務諮詢等各面向的支持。加上位於巴黎市中心，交通便利，因此吸引許多新創企業進駐。

2、空間運用得宜

從接待處進入 STATION F 最前方區域，1 樓大廳寬廣開闊，自然光源由透明屋頂引洩而下，採光良好，可提供廠商及團體辦理產品發布、業務推廣等活動。訪團到訪

時，恰好有新創公司宣傳迎賓車穿梭期間。大廳 2 旁設有沙發休息區，甚至擺放遊戲機台，供內部員工及訪客自由使用。2 樓則有一間一間獨立的創意室及商談空間。STATION F 中間區域則為各進駐企業的辦公空間，禁止訪客參觀；最後一個區域則為對外開放的小型餐飲商場，民眾用餐之餘，也藉此了解 STATION F 新創基地。(請參見圖 11-16)

透過私部門的力量，重新活化既有空間，並創造出前所未有效益，既能避免重新建造場館的高額經費以及環境影響，又能為該地區發展開拓新方向，值得參考借鏡。



圖 11：入口接待處

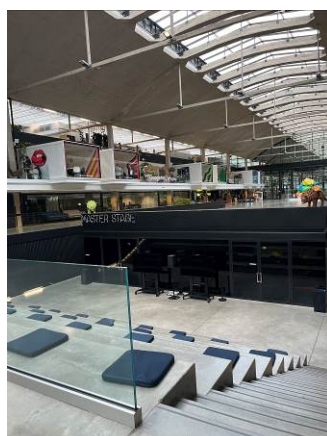


圖 12：大廳



圖 13：宣傳迎賓車



圖 14：休息區



圖 15：辦公區域



圖 16：商場

四、法國國家體育運動表現科學研究院

法國國家體育運動表現科學研究院(INSEP)成立於 1945 年，為法國重要的運動科學和運動訓練中心，為法國培育眾多國家級頂尖運動選手，並協助提升選手於國際運動賽事的成績。此外，也相當重視選手的教育及協助運動員職涯發展。

本次由國際關係處處長 Bābak AMIR TAHMASSEB、專案經理 Simon Ravello、實驗

室主管 Gael Guilhem、研究員 Adrien Sedeaud 及研究加值專案計畫經理 Adrien Marck 等人與本訪團交流，從其簡介中得知 INSEP 相當重視透過科學培訓選手，設有 2 個實驗室，執行法國國家研究總署（French National Research Agency, ANR）補助的重要計畫，也參與法國運動部自 2021 起建立的運動資料中心(簡報內容如附件 3)。簡報結束後，專案經理 Simon Ravello 帶領訪團至各個單項運動場館參觀(請參見圖 17-21)。INSEP 擁有體操、游泳、拳擊、角力、合氣道等專項運動場館及先進設備，例如體操場設有攝影機，可即時拍攝運動員練習時的影像，運動員於動作操練完畢後，可立即觀看，了解自己動作是否確實，如有失誤，則修正動作後繼續練習；泳游館中，游泳池旁也裝設攝影機，掌握練習狀況，並設有重量訓練室、冷熱水療池等，協助運動員提升肌耐力，以及疲勞恢復。參訪心得簡述如下：

1、可作為國際合作重點機構

INSEP 與我國國家運動訓練中心成立宗旨相同，都在致力於培養優秀的運動員；與我國國家運動科學中心相同之處在於重視運動科學及運動科技的研究，並與學研機構合作研究。本次訪團訪問後，INSEP 也表達與台灣合作的意願，並希望在簽屬合作意向書(MOU)之外，能有更為實質性的專案項目的合作。以 INSEP 的先進設備及訓練素質，除可考慮作為選我國手移地訓練的選項外，其擁有的運動科學研究能量，也相當適合作為學者移地研究的場域。

2、運動場館充分運用

INSEP 各個運動場館中，最讓人印象最深刻的是建於 1975 年的室內體育場，其主體結構為木製，參訪當下仍能聞到木頭香氣，也看到田徑、跳遠等運動員自在的練習，氣氛良好。對於不符合現在運動競賽所需的練習場地，INSEP 也充分運用空間，例如將自行車比賽場地轉化為運動科技區，以科技輔助選手練習。



圖 17：體操館



圖 18：游泳館



圖 19：舊自行車道轉化為運動科技區域

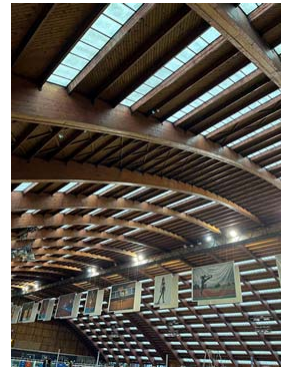


圖 20：田徑館屋頂



圖 21：田徑館內部

五、巴黎第十二大學

巴黎第十二大學(UPEC)創立於 1970 年，該校體育與運動科學系(Sciences et Techniques des Activités Physiques et Sportives, STAPS)積極培養專業的運動科學研究人才，設有涵蓋運動生理學、運動心理學、運動社會學、運動管理等領域課程。

訪團抵達該校後，首先參觀多用途球類場地(同一場地可供排球、羽球及籃球使用)、體操等體育運動訓練場地(如圖 22-23)。接著，由 LIRTES 跨學科整合研究室主任 Pierrine ROBIN 教授、副主任 Nathalie Carminatti 副教授、Alain Mouchet 教授、Créteil 體育運動科學系主任 Jéérôme Frigout 副教授、運動表現分析碩士學程 Olivier Degrenne 副教授與訪團成員座談，詳細說明該校體育與運動科學系、LIRTES 跨學科整合研究室及相關研究專案(簡報內容如附件 4)，並與訪團成員交換意見(如圖 24-25)。其中 Pierrine ROBIN 教授提及在專案形成過程中，必須與相關單位及人員，包括其他領域教研人員、教練、運動員及專項運動俱樂部經理等不斷的溝通說服，才有可能順利達成研究目標。同樣的，精準運動科學專案計畫研究團隊也相當重視教練及運動員的意見，以其需求為導向進行研發；所研發的技術也按照實際應用的結果及經驗進行調整，以提供擬定訓練策略，以及提供所需的技戰術分析資料。



圖 22：多功能體育館(1)



圖 23：多功能體育館(2)



圖 24：雙方學者交換意見(由葉士弘拍攝)



圖 25：雙方學者交換意見(葉士弘拍攝)

六、索邦大學

巴黎第四大學和巴黎第六大學於 2018 年合併成為索邦大學(Sorbonne University)，該校歷史悠久的研究型大學，擁有頂尖的研究單位和實驗室，學術聲譽卓著。

由於精準運動科學研究專案計畫中有與生物醫學、復健醫學、物理治療相關的研究內容，故本次訪團特地前往拜訪該校生物醫學影像實驗室 Quentin Grimal 教授，其特別介紹如何運用超音波進行骨骼的超音波測量和定量成像，藉以瞭解骨骼病理生理學以及診斷骨質疏鬆症等(請參見圖 26-29)，而先進的生物醫學影像技術將有助於診斷運動傷害及治療復原情形。



圖 26：索邦大學校園



圖 27：Quentin Grimal 教授簡介索邦大學
(葉士弘拍攝)

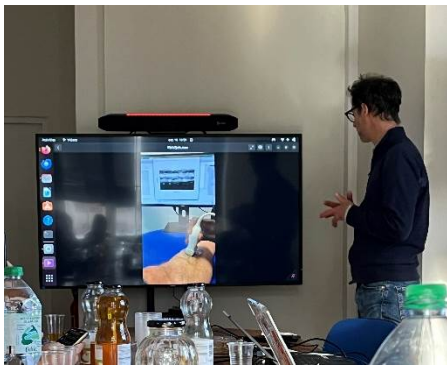


圖 28：Quentin Grimal 教授說明超音波測量骨骼情形(1)



圖 29：Quentin Grimal 教授說明超音波測量骨骼情形(2)

七、巴黎聖日耳曼足球俱樂部—王子公園體育場 (Paris Saint-Germain soccer Club)

巴黎聖日耳曼足球俱樂部成立於 1970 年，其主場為王子公園體育場(Parc des Princes)則建於 1972 年，是許多重要國際足球賽事的舉辦場地，也是 2024 年巴黎奧運會足球比賽場館之一。體育場可容納近 48,000 名觀眾，即使歷史悠久，但球場內部仍然相當新穎舒適，提供觀眾優良的觀賽環境，也吸引許多著名企業贊助，並有其專屬的貴賓室。本次訪團除參觀球場之外，也參觀球場內部的記者採訪室、物理治療室、簡易的運動設施區、歷年獲獎獎盃及經典比賽照片展示走道等(請參見圖 30-33)。透過精心設計的球場導覽活動，即使不是足球運動迷，一般民眾也會被激起對足球運動的興趣，值得我國大型運動場館經營及發展運動產業的參考。

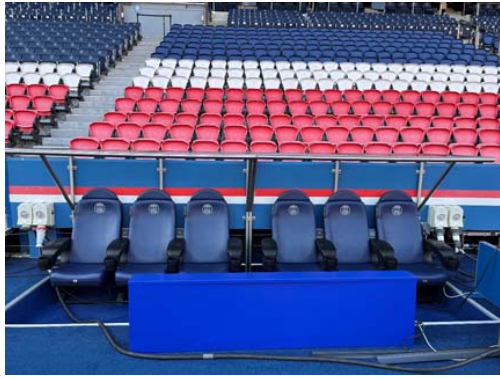


圖 30：球員座位區



圖 31：企業贊助貴賓室



圖 32：足球場全景

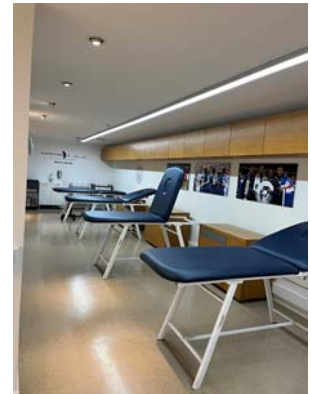


圖 33：治療室

除了參訪上述產學研機構，本次訪團也拜訪駐法國台北代表處，以及參觀法國手球之家，並與法國電子遊戲聯合會洽談合作事宜。(請參見圖 34-35)



圖 34：郝大使與訪團於駐法國代表處合影

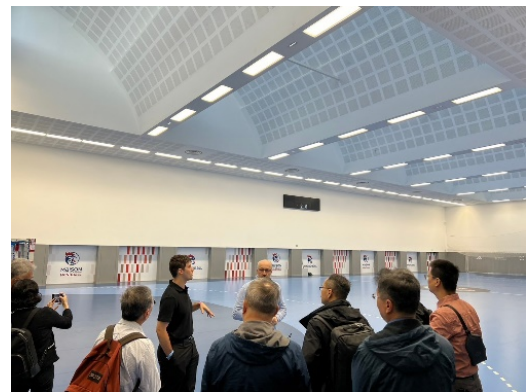


圖 35：參訪手球之家

參、結論及建議

本次人文處協同專案計畫研究團隊赴法國運動科研相關單位參訪，主要的觀察所得及建議說明如下：

(一)創新賦能為專案管理關鍵

迪卡儂 BTWIN Village 創新研發中心簡報提及「創新是賦能，不是目標」，的確，創新應該是達到目標的手段，而非政策或專案計畫最終目的地。衡量專案計畫成果時，往往將計畫產出創新程度作為主要衡量指標，但創新研發的技術或產品應具有實用價值，能賦予標的群體持續往預定目標前進的能力，成為其助力並能落地實踐，以及符應社會需求，更應該是專案計畫成功與否最應該重視的關鍵性指標。未來，將以創新產生的效益作為研擬政策及推動專案計畫考量的重點。

(二)優質研發環境及研究人力

本次參訪與運動產業發展密切相關的機構及研發中心，似乎都以私人企業成立或資助的機構較具規模，且呈現較佳的成效。因此，建議從加強提供優質研發環境及研究人力著手，提升國內外企業在臺灣設立研發中心的意願，讓臺灣的運動產業從代工製造轉換為以研發為主。

(三)運動文化社會生態研究

另一方面，發掘或創造需求可說是產業發展的開端。產業能否蓬勃發展，奠基於該產業產品或服務是否能夠符合需求；需求也必須達到一定的規模，企業才能獲利；企業有獲利，才會再投入資本，精進產品或服務。因此，建議推動運動文化社會生態研究，鼓勵全面性的瞭解掌握各地的運動需求、喜好、習慣及風氣等文化社會脈絡及現況。例如，台灣米倉田中馬拉松的舉辦，除將鄉鎮地區性的運動賽事拓展成為全國性的運動賽事，吸引產業參與，也讓跑步成為當地居民日常生活的一部分。「田中馬」成功經驗植基於怎樣的文化社會生態，可讓其他鄉鎮從中汲取學習，用以發展自己鄉鎮特色的該項運動賽事。運動文化社會生態研究成果可提供產業參考，有益於其開發符合民眾需求的運動產品或服務，以及開拓潛在的市場；也可作為政府發展鄉鎮地區特色運動的參考依據，例如提供符合當地運動需求的運動場館及服務項目，增加運動意願等。

(四)運用 QR 圖碼線上控管進出

本次訪團到法國國家體育運動表現科學研究院及巴黎聖日耳曼足球俱樂部—王子公園體育場參訪時，入場管控都是採用透過手機掃描 QR 圖碼的方式，迅速便利。建議於開會通知單上印製 QR 圖碼，可線上控管進出科技大樓，與會者也無須攜帶紙本開會通知單，減輕人力核對負擔。

附件一：訪團人員名單

序號	姓名	服務單位	職稱	備註
1	蘇碩斌	國家科學及技術委員會 人文及社會科學研究發展處	處長	
2	江佩穎	國家科學及技術委員會 人文及社會科學研究發展處	助理研究員	
3	陳美燕	國立臺灣師範大學運動休閒與餐旅 管理研究所	優聘教授	精準運科計畫 營運推動小組
4	阮啟弘	國立中央大學認知神經科學研究所	講座教授	第 2 期精準運 科足球團隊
5	葉士青	國立中央大學資訊工程學系	教授	第 2 期精準運 科足球團隊
6	鄭景峰	國立臺灣師範大學運動競技學系	教授	第 2 期精準運 科體操團隊
7	林淵翔	國立臺灣科技大學電子工程系	教授	第 2 期精準運 科體操團隊
8	連震杰	國立成功大學資訊工程學系	教授	第 2 期精準運 科排球團隊
9	黃鴻鈞	國立成功大學體育室	助理教授	第 2 期精準運 科排球團隊
10	馬席彬	國立清華大學電機工程學系	教授	第 2 期精準運 科棒球團隊
11	劉強	臺北市立大學運動器材科技研究所	特聘教授	第 2 期精準運 科棒球團隊
12	黃致豪	國立臺灣體育運動大學運動資訊與 傳播學系	教授	第 2 期精準運 科棒球團隊
13	吳育任	國立臺灣大學光電工程學研究所	教授	第 2 期精準運 科棒球團隊
14	王振興	國立成功大學電機工程學系	特聘教授	第 2 期精準運 科羽球團隊
15	楊雅婷	國立成功大學教育研究所	特聘教授	第 2 期精準運 科羽球團隊
16	林政寬	國立陽明交通大學資訊工程學系	副教授	第 2 期精準運 科羽球團隊

序號	姓名	服務單位	職稱	備註
17	吳俊霖	國立中興大學資訊工程學系	教授	第 2 期精準運 科桌球團隊
18	孫敏德	國立中央大學資訊工程學系	教授	第 2 期精準運 科桌球團隊
19	周學雯	國立成功大學體育健康與休閒研究所	教授	第 2 期精準運 科游泳團隊
20	林政佑	國立成功大學醫學系耳鼻喉科	教授	第 2 期精準運 科游泳團隊
21	徐敬亭	臺北市立大學運動器材科技研究所	副教授	第 2 期精準運 科舉重團隊
22	許維君	國立臺灣科技大學醫學工程研究所	教授	第 2 期精準運 科女鐵團隊
23	張雅如	長庚大學物理治療學系	教授	第 2 期精準運 科女鐵團隊
24	林文斌	國立臺北藝術大學體育中心	教授	運科擴能團隊
25	陳龍弘	國立體育大學國際運動管理與創新 博士學位學程	教授	運科擴能團隊
26	掌慶維	國立臺灣師範大學體育與運動科學 系	副教授	運科擴能團隊
27	謝立文	國立臺北大學休閒運動管理學系	副教授	運科擴能團隊
28	賀耀華	國立臺灣師範大學資訊工程學系	副教授	運科擴能團隊
29	黃經堯	國立陽明交通大學電機工程學系	教授	精準運科計畫 營運推動小組
30	林日璇	國立政治大學傳播學院	特聘教授	精準運科計畫 營運推動小組



PARIS&CO

Learning Expedition / sports innovation

September 2024

 **NSTC** 國家科學及技術委員會
National Science and Technology Council

Territorial innovation agency of Paris and the Metropole

Within **sector verticals**, we lead ecosystems that bring together key accounts, institutions, startups and experts to initiate sustainable and responsible transformations

We are developing our business as part of an open innovation dynamic, working closely with more than **100 major companies and institutions.**

65

Employees spread
over 6 sites

11

Sectoral
expertises

+20

Years of
experience

PARIS&CO



We work alongside three types of players

Entrepreneurs



Enabling young innovative companies to accelerate their development through support packages tailored to their needs

Key private and institutional accounts



Facilitating the transformation of major private and institutional accounts through startup collaborations, in-house trainings and sectoral monitoring.

Territories and local authorities



Deploying virtuous approaches in local areas and developing structuring projects through local engineering, urban experimentation and social innovation.

PARIS&CO

Our multi sector expertise

Urban Experimentation



Social innovation



Sustainable food



Esport



Finance & Insurance



Future of work



Cultural and creative industries



Health



Sport



Tourism



Sustainable city



PARIS&CO

With over 100 public and private partners supported



5

Sports Innovation Hub (ex Le Tremplin)

Clients / partners



Few high impact startups we have worked with



PARIS&CO

6

Our offer

PARIS&CO



Organising an innovation inspiration session

Paris 2024 has been a catalyst for the world of sports this summer, making Paris a key location for decision-makers from all over the world.

As a leader in innovation, Paris&Co proposes inspiring sessions alongside this unique event.

We can organise a half-day session for you, with tailor-made contents, linked to your business activity or the theme of sports.



PARIS&CO

To raise awareness and build a culture of innovation

Format : a learning expedition in our offices to address the following issues:

01 | UNDERSTAND AND IMMERSE YOURSELF IN AN INNOVATION PLATFORM

- ◆ Presentation of Paris&Co and its incubator dedicated to Sport or sector expertise related to your business.
- ◆ Visit of the incubator.

02 | UNDERSTANDING INNOVATION TRENDS IN YOUR BUSINESS SECTOR

- ◆ Presentation of the state of the innovation market in your sector and the major emerging trends that will shape your sector in the future.
- ◆ Presentation of inspiring initiatives and collaborations between startups and large private/institutional groups in its sector of activity in France.

PARIS&CO

157 boulevard Macdonald
75019 Paris - France

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Constant Capron

Sports Manager

Partnerships

Constant.capron@parisandco.com

06.63.83.33.70

 [Lien LinkedIn](#)



EVENT ROOM

- 132 square meters
- 70 pers sitting
100 pers standing
- Conference
Seminar

Equipment :

- WIFI
- Microphone and sound system
- Paperboard
- 70 chairs
10 tables
- Video projector

Program :



LE TREMPLIN

6 Rue Claude Farrère 75016 Paris

11



TROPHIES ROOM

- 60 square meters
- 20 pers sitting
- Conference
Meeting

LE TREMPLIN

6 Rue Claude Farrère 75016 Paris



Equipent :

- WIFI
- Paperboard
- TV equipment
- 20 Chairs
6 Tables

Program:



12



PARIS&CO



October 7th 2024

Territorial innovation agency of Paris and Metropolitan area

Within **economic industries**, we lead ecosystems that bring together key accounts, institutions, startups and experts to initiate sustainable and responsible solutions.

We develop our business as part of an open innovation dynamic, working closely with more than **100 major companies and institutions**.

65

Employees on 6 sites

11

Sectoral expertises

+20

Years of experience

PARIS&CO



Paris&Co Governance – Board of Directors

City of Paris and Grand Paris Metropolis Board Members

Geoffroy BOULARD,
Mayor of the 17th district & Deputy Chairman of Grand Paris Metropolis in charge of communication and digital innovation

Jérôme COUMET,
Mayor of the 13th district

Karine FRANCLLET,
Mayor of Aubervilliers

Pénélope KOMITES,
Deputy Mayor of Paris in charge of innovation, economic attractiveness, Paris 2030 foresight and Resilience

Éric LEJOINDRE,
Mayor of the 18th district

Pierre RABADAN,
Chairman of the Economic Development Commission of Grand Paris Metropolis, Deputy Mayor of Paris in charge of sports, Olympic and Paralympic Games Paris 2024 and Seine river

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Banque des Territoires

Alexandre LABASSE,
General Director, APUR (Paris Urbanism Agency)

Constance PARODI,
OTCP (Paris Convention and Visitors Bureau)

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Deputy CEO, Groupe ADP

Pierre-Henri DEBALLON,
CEO of Weezevent, Chairman of the Board

Jean-Luc GIROD,
Orange

Sandrine MOREY,
CEO of SEMAPA (Paris Urban Development Compagny), Treasurer

PARIS&CO

3

Our strenghts

20+ years' experience supporting young innovative companies

10 years' experience assisting major accounts with their transformation challenges

Strong **sector expertise**

A **trusted third party** in tune with public interest issues

A **territorial structure** with national impact

PARIS&CO

Our CSR ambitions

- ✓ Our commitment: to be a role model for the best CSR standards by 2025
- ✓ Fostering a cross-functional offer for our clients based on these commitments.
- ✓ Assisting entrepreneurs and project leaders in the process with customized tools.
- ✓ Serving the objectives of public stakeholders through impact-driven innovation

4

Our jobs



DETECT & ANALYZE
the challenges of **territories** and **organizations**



IDENTIFY
Source, generate sustainable solutions



SPREAD INNOVATION
Communicate on innovative solutions



REVEAL
Convey these challenges to **innovative entrepreneurs**



SUPPORT
Incubate and foster growth, **conduct urban experimentation** and demonstrate

PARIS&CO

5

Our multi-sector expertise

Urban experimentation



Social innovation



Sustainable food



Esport



Finance & Insurance



Futur of work



Cultural and creative industries



Health



Sport



Tourism

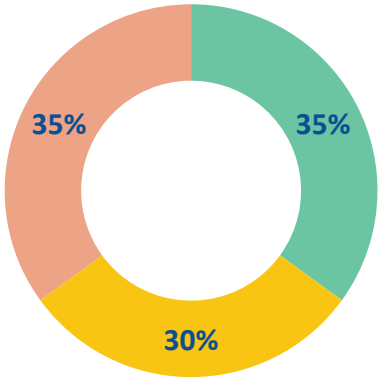


Sustainable city



PARIS&CO

2023 turnover : 9 M€



■ Public sector funding ■ Startups ■ Private sector funding

PARIS&CO

Key figures

500+

Startups incubated & projects supported in 2023

100+

Corporate & institutionnal partners in 2023

2000+

Alumni

PARIS&CO



We work alongside three types of player

Entrepreneurs



Enabling **young innovative companies** to accelerate their development through support packages tailored to their needs

Key private and institutional accounts



Facilitating the transformation of **major private and institutional accounts** through startup collaborations, in-house training and sectoral monitoring.

Territories and local authorities

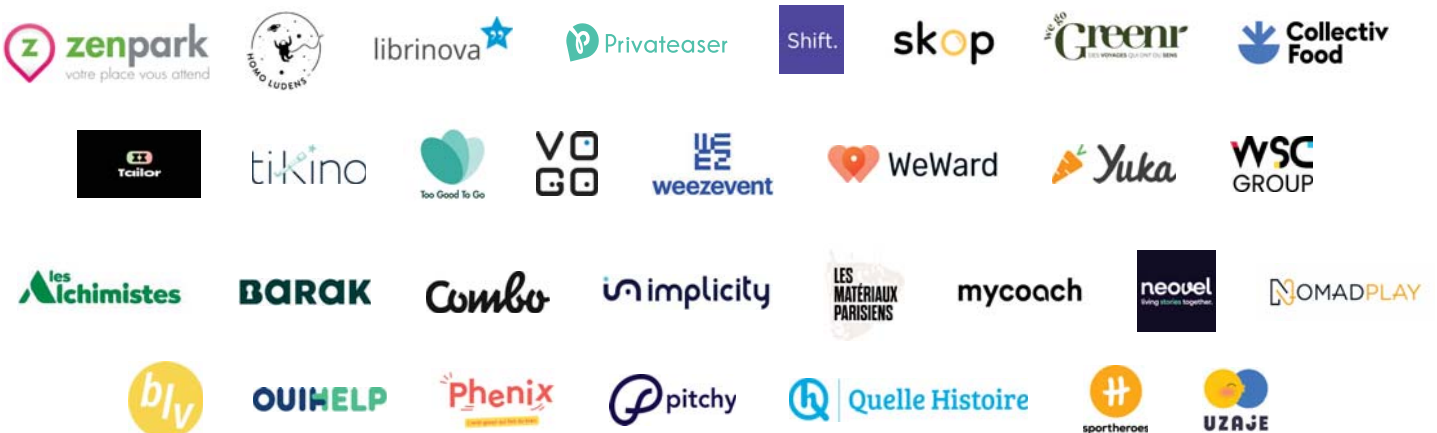


Deploying virtuous approaches in **local areas** and developing structuring projects through local engineering, urban experimentation and social innovation

PARIS&CO

More than 2000 alumni

Startups & project holders



PARIS&CO

With over 100 public and private partners supported








PARIS&CO

PARIS&CO

How we work with our startups

Support formats & services

Entrepreneurial and sectoral support

INDIVIDUAL		COLLECTIVE	
 Suivi follow-up ★	 Office hours expert	 Workshops	 Partner meetings
 Mentoring ★	 Support for fundraising	 Investors meetings	

★ Essential and Premium offers only

Services

 Visibility	 Partnerships
--	--

PARIS&CO

13

Entrepreneurial and sectoral support

Individuel

-  Individual follow-up
-  Office hours expert
-  Mentoring
-  Support for fundraising

Benefit from regular contact with your mentor team.

Gain perspective on your projects by benefiting from the experience and network of the Paris&Co team and your mentor.

Identify and talk to experts who can help you by putting you in touch with them.

Benefit from personalised fund-raising support.

PARIS&CO



Entrepreneurial and sectoral support

Collective



Workshops



Partners meetings



Investors meetings

Meet experts in your sector at workshops

Maximise synergies with other start-ups in the Paris&Co network

Multiply the opportunities to meet our partners and investors in your sector ecosystem

PARIS&CO



Services



Visibility

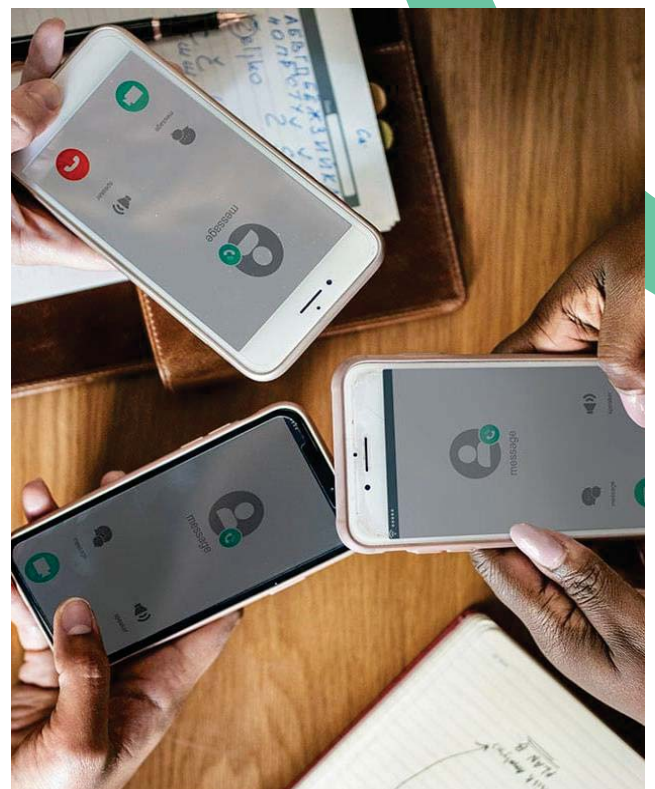


Partnerships

Take advantage of visibility opportunities within the Paris&Co network and the ecosystem of innovation players

Save time and money with our negotiated partnerships (AWS, Stripe, Intercom, etc.)

PARIS&CO



How we work with our partners

How we work with our partners

A value proposition tailored to the level of maturity of each of your projects.



01 | EXPLORATION

Deciphering innovation trends & framing the needs of your innovation project or approach.

02 | IDENTIFYING SOLUTIONS

Identify solutions through qualified sourcing and/or meetings with innovative project leaders, using our Observatory tool.

03 | MOVING TO ACTION/ EXPERIMENTATION

Deploying solutions through training, tools, advice and support in testing solutions in real-life conditions.

04 | VALUE ENHANCEMENT

Measure the impact of your innovation project or approach and promote it to an ecosystem.

1. EXPLORATION

Our different support formats



Group intelligence

Setting up diagnosis, inspiration, needs prioritisation, co-construction and business commitment workshops around a project/game.



Trend note & keynote

Production of a tailor-made summary document for distribution to your stakeholders, addressing the innovation challenges of an emerging theme or technology. Format: oral presentation or distribution of a written document.

Un espace atypique au sein d'un environnement d'infrastructures et d'activités



Territorial analysis

Drawing up a study report highlighting the key dynamics and characteristics of an area in order to identify priority areas for development.

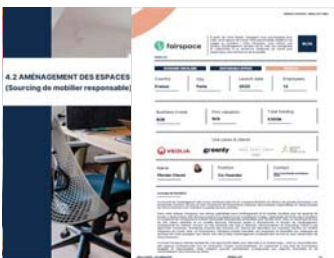


Learning expedition

Organisation of an inspiring sequence combining experience sharing with innovators and players in the field and reflections linked to a project or issue.

2. IDENTIFYING SOLUTIONS

Our different support formats



Sourcing solutions

Production of a document presenting innovative solutions and project leaders in line with your needs, at the territorial level of your choice (from local to international).



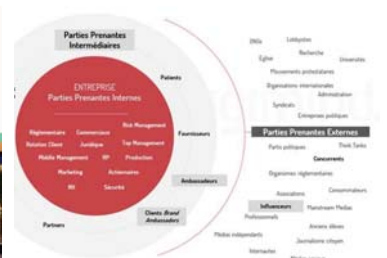
Meeting(s) with project leaders

Organisation of a time for presentation and discussion with project leaders selected for you and addressing one or more of your priority needs.



Call for projets

Organisation of a call for innovation from our ecosystem, via our networks, to engage and mobilise innovators around your need/approach.



Stakeholder mapping

Identification of the stakeholders present in an area, the competitive dynamics and potential synergies with local players contributing to a project's local anchoring strategy.

3. MOVING TO ACTION/ EXPERIMENTATION

Our different support formats



Structuring an experimental approach

Setting up a methodological approach for your employees to make it easier for your teams to set up experiments in the field.



Piloting an experimental approach/project

Setting up a methodological approach alongside you, with our teams piloting the testing of solution(s) in real-life conditions.

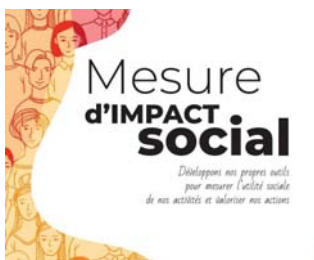


Programmatic track consultancy

Implementation of strategic recommendations for running an innovative venue - based on a territorial analysis and stakeholder mapping.

4. VALUE ENHANCEMENT

Our different support formats



Impact study

Setting up a process for evaluating and measuring the impact of field trials to verify the benefits of a project or investment.



Communication event or learning expedition

Organisation of a tailor-made event for political and private decision-makers to showcase an innovative approach.

La 6ème édition du Cahier Tendances de Paris&Co et Atout France explore les défis et opportunités du tourisme régénératif, des hôtels nouvelle génération, de la gestion des déchets, du tourisme sportif et des micro-aventures, ainsi que du tourisme connecté et de la cybersécurité.



Co-branded content

Co-production of variable-format content that can be adapted to your communication strategy (forum, podcast, video, etc.) highlighting an innovation project/approach.



The « Paris de l'Innovation »

Associate your image with the biggest annual gathering of innovation players and benefit from a dedicated, tailor-made sequence.

Case Studies / Partners references

Tailor-made service



Partner request

Source innovative solutions to facilitate access to sport for girls and women

Our proposal

Launch and operate a tailor-made support programme for startups

Mission Framing

Identification of innovative solutions

- Workshop to define and prioritise themes and carry out qualified sourcing of innovative solutions in Europe;
- Creation of a platform for selecting and evaluating candidate projects
- Implementation of a communication plan to attract relevant international projects
- Analysing applications and coordinating the selection panel

Deployment of a support programme

- Tailor-made support for all the startups in the programme, benefiting from our experts and our knowledge of the sports sector
- Implementation of key success factors for all stakeholders, including access to the expertise of adidas employee mentors;
- Provision of office space in our offices and access to a vibrant ecosystem for these new projects.



Sector trend note



Partner request

Acculturate managers / decision-makers on the state of the market for an emerging technology. Benefit from recommendations from Paris&Co.

Our proposal

Drafting of a detailed trend note on the economic and regulatory challenges of the target technology.

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Mission framing

Market study

- Carrying out interviews with technical experts to provide different perspectives on the use of the technology.
- Identify regulatory constraints and emerging business trends related to the target technology.
- Mapping the key players in different territories and business sectors.
- Highlighting selected use cases incorporating the target technology.

Qualified sourcing of solutions

- Qualified sourcing of solutions to identify short- and medium-term business opportunities for our customer.

Strategic recommendations

- Share personalised recommendations based on the customer's overall strategy.



Metropolitan Innovation Areas (QMI)

Context: Innovation districts that will bring together, over an 18-month period, a number of experimental sites focusing on one or more urban issues.

The objectives of these Metropolitan Innovation Districts:

- Enabling local authorities to shape the towns of tomorrow
- Innovate in terms of ecological and social transition with an ecosystem of players in the city-building process
- Giving visibility to the local authorities involved: Aulnay-Sous-Bois / Meudon / Sceaux / Noisy-Le-Grand)

Preliminary action: Carrying out a territorial diagnosis as part of these QMIs

Methodology for this sensitive diagnosis:

- A mixed approach to analysing the issues, perceptions and needs of local users, in order to facilitate the choice and future implementation of the innovations proposed by the project leaders
- A half-day launch event in each municipality: local stakeholders (issues/expectations/project vision) are interviewed by the town's elected representatives and technicians.
- Two urban walks: an exploratory walk to raise awareness and find out where things are, and a sensitive walk with key participants (residents, shopkeepers, employees, city technicians, experts, etc.) to gather the expectations and feelings of users as close to the ground as possible.
- Interviews conducted by Paris&Co

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Sport and Youth Working Group



Partner request

Find ways to get teenagers (aged 11-15) moving and unite the sports ecosystem in the fight against sedentary lifestyles.

Notre proposition

Setting up and coordinating a Sport and Youth Working Group with other key players in the ecosystem.

Mission framing

Organisation of a two-day cycle of group workshops

- Editing of key sequences and identification of participants and speakers for the two group workshops (entrepreneurs, institutions, major groups, etc.)
- Running a one-day workshop to identify the obstacles and opportunities to getting young people moving.
- Running a one-day scoping workshop with a view to launching a call for projects to the entire Sport ecosystem.

Organisation of a dedicated call for projects

- Creation of an online platform to facilitate the dissemination and submission of project applications
- Flash sourcing of project promoters (entrepreneurs, SSEs, major accounts, institutions, etc.) addressing the target audience.
- Organisation of a selection committee for 8 winning projects

Organisation of a communication event at VIVATECH

- Mise Setting up and coordinating a communication campaign as part of VIVATECHNOLOGY 2023

Production of a reference deliverable

- Drafting and production of a reference document presenting the key lessons and inspiring approaches for political and economic decision-makers.

Tailor-made service



Partner request

To support the innovation department in its efforts to address the issues of inclusion and universal accessibility at the Roland Garros tournament.

Our proposal

Sourcing the most relevant innovative solutions and framing the test phase with potential partners

Mission framing

Problem framing and prioritisation workshop

- Organisation of a "problem framing" workshop to prioritise inclusion issues around a sporting event

Sourcing of solutions to meet these challenges

- Co-construction of specifications with a view to sourcing solutions to the problems identified
- Qualified sourcing of solutions

Understanding and testing with sourced startups

- Organize a half-day presentation of the solutions selected from the startups sourced
- Support in scoping and launching a POC with the selected project.

keia

Vos vidéos automatiquement en Langue des Signes.

Rendez vos vidéos vraiment accessibles en intégrant keia, la première intelligence artificielle qui traduit vos contenus en Langue des Signes Française.

DEMANDER UNE DÉMO



Learning expedition



Partner request

Open managers' minds to new innovations and market trends and get them out of their comfort zone

Initiating business partnerships with startups

Our proposal

Organising a learning expedition within our ecosystem

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Missing framing

Raising employee awareness of innovation

Target: 20 members of the Sodexo Transformers Community

1) Inspirational morning

Keynotes and feedback from key players in the Paris&Co ecosystem in response to Sodexo's innovation issues (key accounts, institutions)

2) Operational afternoon

Presentation of startups and collective intelligence workshop on the levers of action to be taken

>> **Format: 1 day of hybrid workshops**



Measuring and promoting a process



Partner request

Develop a tailor-made methodological tool to study the multiple impacts of the structures supported by the FAPE EDF.

Our proposal

Structuring and support for setting up customised impact measurement tools

Mission framing

Problem framing and prioritisation workshop

- Co-construction of an internal survey of FAPE contributors on the priority indicators to be taken into account when measuring the impact of projects supported by FAPE.
- Recommendations and proposals for tools (indicator library, user manual, customised canvas, etc.) and an analysis method for test projects.

Training and testing the tool

- Organisation and delivery of training for referral agents on how to use the tool and measure and analyse the results of test projects.
- Implementation of teaching tools to help teams become autonomous in measuring the impact of an SIAE.

Feedback and scalability of the approach

- Workshop to present the results and promote the approach internally.
- Setting up a tailor-made event to promote EDF's impact initiatives to the CSR ecosystem and public decision-makers.



Tailor-made support



Partner request

Helping the Urban Community to address its problem of reducing anthropogenic pressures and their effects on the Seine and its ecosystem.

Our proposal

Launch and operate a tailor-made support programme



Missing framing

Structuring a call to experiment :

- Innovation advice and design of decision support tools for public elected officials
- Structuring a community of local actors and stakeholders around the question asked
- Animation of collective intelligence workshops to define the contours of the consultation specifications.
- Identification of use cases and drafting of all consultation documents
- Sourcing of innovative solutions
- Analysis of the 27 applications and organization of the jury of elected officials and experts with a view to the selection of 6 projects.

Implementation, monitoring and evaluation of winning experimental projects :

- Framing of the 6 experimental projects based on 6 practical cases
- Legal framework of project
- Animation of acculturation time with the CASGBS technical teams
- Carrying out the evaluation of deployed projects

Piloting an ideation process with territorial design students to anchor the project with local stakeholders

- Coordination and partnership with the CY DESIGN SCHOOL STUDENT bief
- Animation of challenge and restitution times



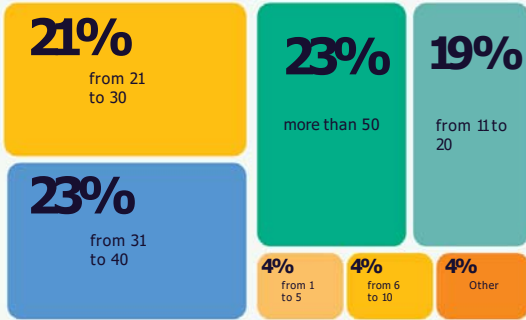
Key insights –
collaborations between
corporate and startups

(study realized end on 2022)

Proof Of Concept (POC) vs Deployment

How many POCs have you carried out with startups over the last 5 years?

Average number of POCs carried out by the groups



90% more than 10 POC.
50% more than 30 POC.

How many deployments with startups have you carried out in the last 5 years?

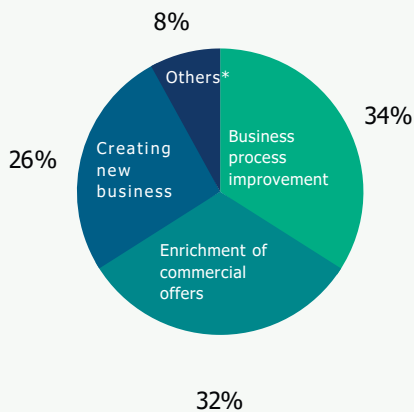
Average number of deployments by groups



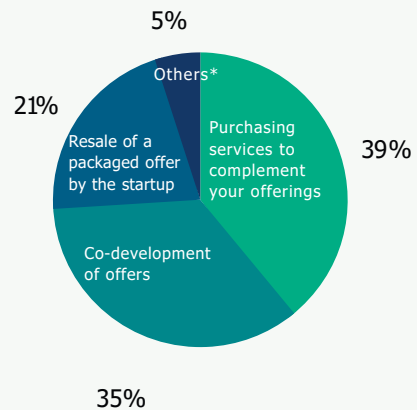
56% Less than 10 deployments.
76% Less than 15 deployments.
8% Less than de 40 deployments.

Why and how major groups work with startups?

What are these deployments about?



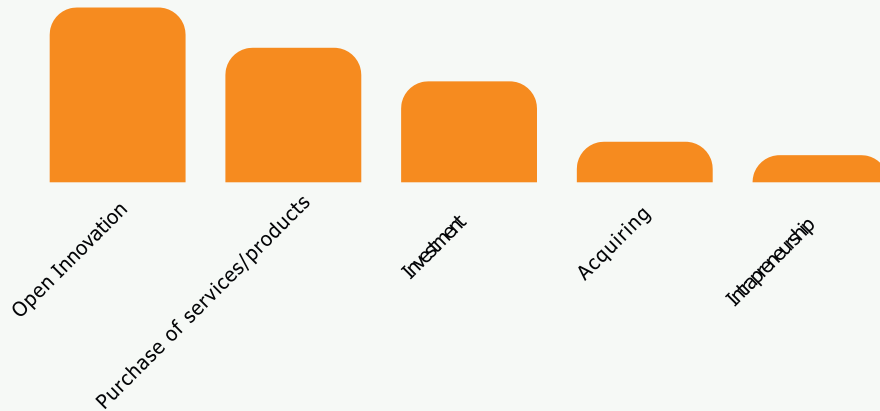
What kind of collaboration have you had with these startups?



Why and how major groups work with startups?

How did you come to work with the startup?

Ranking of collaboration methods



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What are the obstacles to working with startups?



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**Focus on Paris&Co Sport
(ex Le Tremplin)**



Le Tremplin

A fully integrated innovation hub at the heart of Paris' sports landscape



PARIS&CO



Created in 2014.

2500 sqm inside Jean Bouin Stadium.

Architect of the stadium: Rudy Ricciotti

47

Our spaces



PARIS&CO

48

The Sportstech sector

+50 French startups have their annual turnover of more than €1 million.

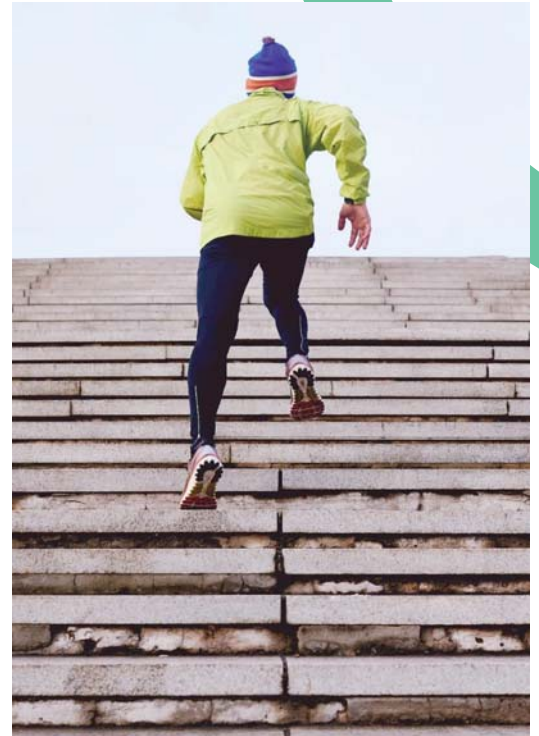
French startups rank between 2017 and 2021 in the Top5 in fundraising in the world, with a total amount invested over this period of \$962 million strongly driven by French sportstech startup Sorare, which raised \$680 million in 2022.*

3 segments in which startups are developing innovative solutions:

- Development of **connected fitness**, whether at home or in clubs
- **Sport at work** promotion
- **NFTs et fantasy leagues** that link the real and digital worlds

** Last survey by SportstechX*

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Key issues for the sector

Paris&Co Sport focuses on key issues in the sport business to support the stakeholders in the sector in their transformation.

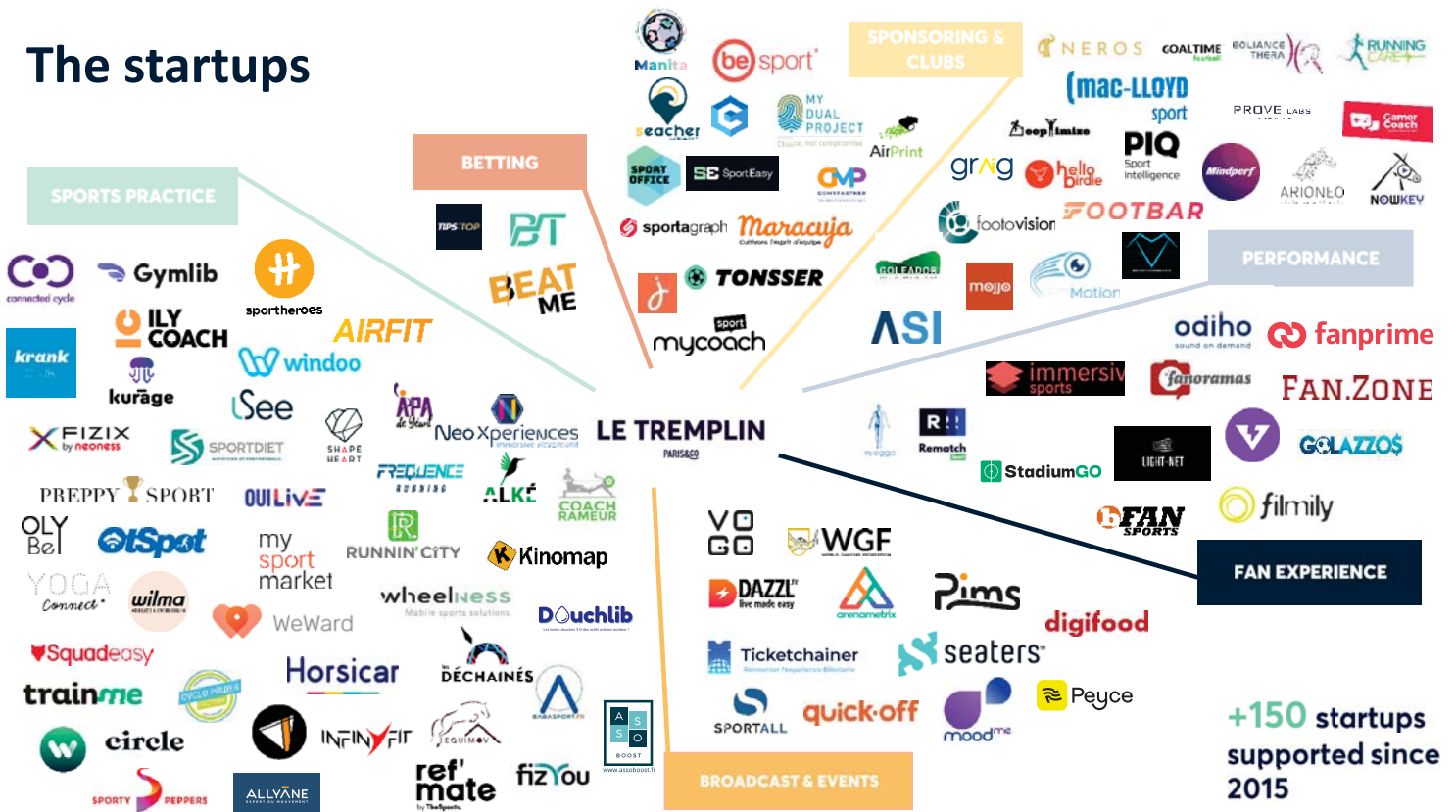
Examples of issues we address for our clients:

- *How do professional clubs attract and engage their fans?*
- *What solutions to enrich the in-stadia fan experience?*
- *The revival of broadcasting and the émergence of OTT platforms*
- *The perspectives of blockchain and tokenisation/NFTs*
- *The digital transformation of sports federations*
- *Artificial intelligence for performance: scouting, data, results.*



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The startups



The sports startups metrics

+30M €

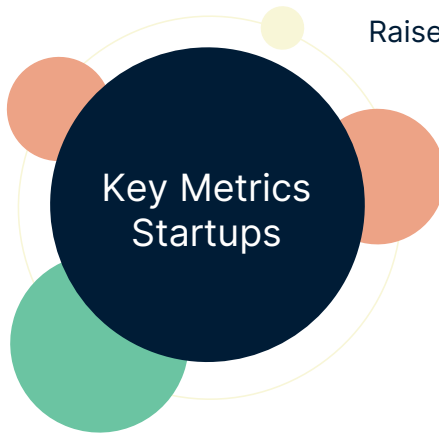
Total Revenue generated by our startups in 2023

+1000

Jobs created since 2015

+200 M€

Raised by our startups since 2015



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Fundraising

VO GO SPORT
14.2 M€

Gymbli
10 M€

mycoach
9.2 M€

TONSSER
5.5 M€

SPORT HEROES GROUP
4 M€

Collaborations success stories



+50

Collaborations generated with startups since 2015

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Focus on a startup: Clim8



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Time for Q&A



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157 boulevard Macdonald
75019 Paris - France

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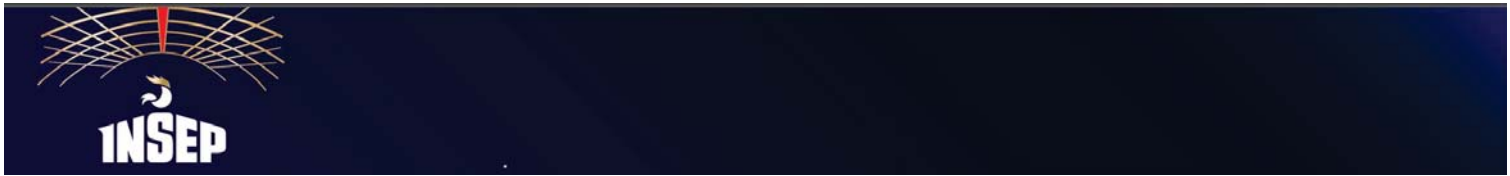
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October 09th 2024



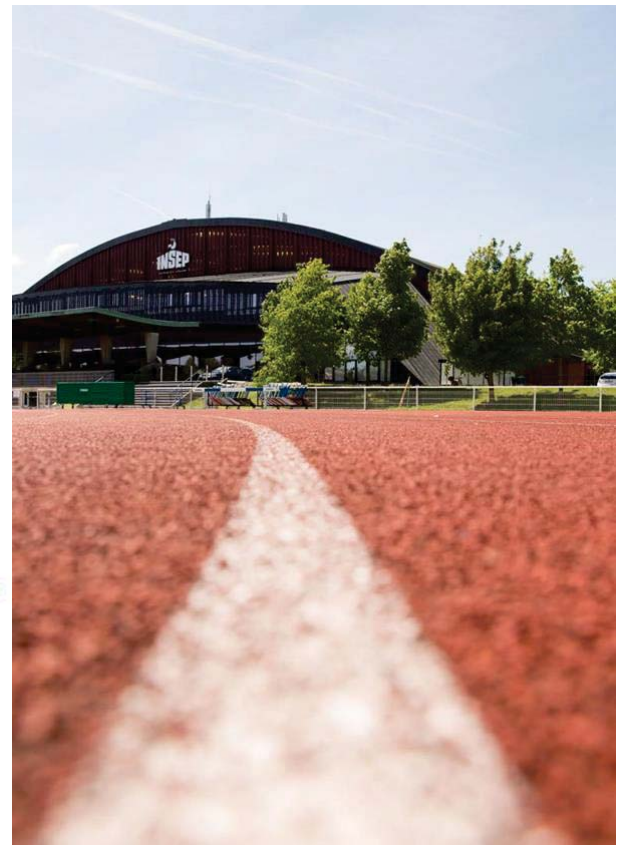
Bâbak AMIR-TAHMASSEB
International & grand INSEP network Director



70 Years of history



French Paralympic Committee (CPSF) moved its headquarters to INSEP in 2017



STRIVING FOR EXCELLENCE

"As one of the world's foremost Olympic and Paralympic training centres, INSEP illustrates France's savoir-faire, which blends technical and scientific expertise with a genuine respect for the athletes. We provide the talent of tomorrow and the champions of today with cutting-edge training and preparation methods that associate their coaches and backroom staff."

28
OLYMPICS & PARALYMPICS SPORTS

780

ELITE ATHLETES

100%

SUCCESS RATE AT THE FRENCH BAC EXAM

2

RESEARCH LABS

280

FEDERAL COACHES

300

COLLEAGUES



TEDDY RINER
JUDO



ESTELLE MOSSÉLY
BIATHLON



ARNAUD ASSOUMANI
ATHLETICS



AMÉLIE MAURESMO
TENNIS



TONY PARKER
BASKETBALL



FÉLICIA BALLANGER
FENCING



JEAN-FRANÇOIS LAMOUR
FENCING



LUCIE DÉCOSSE
JUDO



MARIE JOSÉ PÉCIC
ATHLETICS

Contributing to the success of every athlete who passes through its doors is at the heart of the INSEP's objectives.



Since Sydney 2000, INSEP has accounted for more than 50% of French Olympic medals

PERFORMANCE

EXPERTISE

SAFE SPORT

PASSION FOR SPORT





RESEARCH



Performance optimisation

Performance epidemiology

Medical research

INSEP is the sponsor of 7 of the 12 priority research projects funded by the French National Research Agency (ANR).

PARAPERF, PERFANALYTICS, HYPOXPERF, DDAY, FULGUR, THPCA2024, REVEA



Injury prevention and athlete health

Life balance for athletes

Digital development & innovation

These projects have the Paris 2024 Olympic and Paralympic Games in their sights



LABORATORIES

Sport, Expertise and Performance Laboratory

The laboratory works on the **analysis** and **optimization of high-level sports performance**. Its research program aims to better understand how, on the one hand, to develop athletes' ability to perform while, on the other, preserving their readiness to train and compete.

Works in 5 scientific fields:

- Biomechanics
- Neuroscience
- Physiology
- Psychology
- Sport sociology

And on three research topics:

- Performance Optimization
- Injury prevention
- Life balance





Sport, Expertise and Performance Laboratory (SEP)

It is supported by more than 50 employees, including 13 associate members. It has produced 57 scientific publications, including 45 with Q1 rank and 4 with Q2 rank. In concrete terms, 739 scientific performance support initiatives were carried out for 35 federations. Internationally, the laboratory has established scientific collaboration with 24 different countries.

The laboratory worked to set up **the 28th Congress of the European College of Sport Science (ECSS)**, from July 5 to 7, 2023.

3,000 international participants and speakers gathered at the *Palais des Congrès* in Paris to discuss a wide range of sports science topics.



OPTIMISER LA PERFORMANCE

BILAN DU LABORATOIRE SEP



3

THÈMES SCIENTIFIQUES

- > Thème 1 : Optimisation de la performance
- > Thème 2 : Prévention de la blessure
- > Thème transversal : Equilibre de vie du sportif

16

COLLABORATIONS FÉDÉRALES

57

PUBLICATIONS SCIENTIFIQUES

- > dont 45 publications de rang Q1
- > dont 4 publications de rang Q2

ACCOMPAGNEMENT SCIENTIFIQUE DE LA PERFORMANCE

35 SPORTS 739 ACTIONS RÉALISÉES

52

COLLABORATEURS



24

COLLABORATIONS SCIENTIFIQUES



2022

L'ANNÉE EN CHIFFRES



89

PROJETS





LABORATORIES

Institute for Biomedical Research and Epidemiology of Sport (IRMES)

Develop a national and international research program focusing on four priority areas of investigation:

- physiopathology of sport
- performance epidemiology
- experimental physiology
- prevention through physical activity and sport

It also reinforces the actions carried out by the medical department in terms of prevention and follow-up of high-level athletes.



LABORATORIES – EXEMPLES

FULGUR

Towards **individualized training** load planning adapted to muscle properties to reduce the incidence of sprint injuries for athletics, rugby and ice sports federations.

PARAPERF

Optimizing **Paralympic performance**: from identification to medal winning by Jean-François TOUSSAINT.



HYPOXPERF

Aims at knowing the ideal time to plan a **hypoxia/altitude training method**, its physiological and psychological effects in the short, medium and long term, and individualizing the hypoxic dose to suit each athlete's tolerance.

EMPOW'HER

Aims to maximize the **performance of elite female** athletes by optimizing their responses to training through workloads adapted in synergy with their physiology and **menstrual cycle**.



SCIENTIFIC SUPPORT TO PERFORMANCE

Scientific support to performance is a set of actions based on a scientific approach with the aim of contributing to the improvement of sporting performance.

With this in mind, **the SEP laboratory has been developing a series of applications** designed to accelerate the acquisition, digestion, interpretation, restitution and capitalization of data collected from top-level athletes concerning their athletic and psychological capacities (muscular capacity, cardiorespiratory capacities, exposure to injury risk load quantification, sleep, nutritional habits, psychological habits, psychological traits).

→ INSEP manages **the National Network for Scientific Support to Performance**. This network mainly brings together CREPS, national schools and sports federations scientific referents at the interface between research and training.



SPORT DATA HUB

In 2021, **INSEP**, the **French National Agency** and the **sports direction** of the Ministry of Sports launched the sport data hub.

INSEP, its laboratories and the digital unit fully participate to the Sport Data Hub through several projects and tools:

- **Athletes management system:** a personalized athlete data
- **Medalability:** began in June 2020, aims first and foremost to assess the chances of French athletes to perform at the highest level on the international stage and the Olympic and Paralympic Games(JOP).
- **Daily Tracking Portal:** from the outset, it has been open to establishments with elite athletes or not, it lists all the athletes listed in France (including "Espoir" category and national groups) as well as all athletes registered in the federations' project performance.





DUAL CAREER

INSEP's elite athletes are entitled to personalized support for:

- school-level,
- university
- and professional training.



Secondary education



Higher education



Professional training



Distance learning

The institute has developed a range of initial and continuous training courses suited to meet the needs and constraints of those involved in elite sport.

→ This includes courses that lead to qualifications, customized programs, vocational training days, conference sessions and professional support.



How INSEP supports future Olympic champions through their 360° project: sports, life and studies?

Young athletes already possess great maturity, team spirit and competition that they put to work in their training program.
→ They develop skills of which they are not necessarily aware.

By accompanying them in their life project, and their professional project from their arrival at INSEP, we also contribute to their sports emergence, because all three are connected

MINISTÈRE DE L'ÉDUCATION NATIONALE ET DE LA JEUNESSE
*Liberty
Equality
Fraternity*



Aide à la scolarisation des sportifs de haut niveau
Double cursus de formation vers l'excellence



TRAINING OF ATHLETES

SCHOOL in INSEP



French classical general & technical curriculum



100% success rate at the french baccalaureat graduation





The training programs, with around 30 pathways currently available at INSEP or in institutions that have signed agreements with INSEP, are adapted to the schedules of elite athletes.

Classes are provided on site and/or as distance learning depending on athletes' availability.

External trainings

Nearly 190 athletes took part in external study courses outside the walls of INSEP, with a growing variety of training options (hotel business, IT, banking/insurance, construction and public works, arts and entertainment, etc.).

INSEP signed partnership MoU with:

- Sorbonne University
- National Conservatory of Arts
- National School of Physical Therapy and Rehabilitation
- University Institute of Technology in Créteil



ON-SITE

INSEP is committed to continuing to offer on-site training:

- ✓ Everything is available at one dedicated location
- ✓ The Sports science university (STAPS) programs are provided on site at INSEP under an agreement with UPEC Créteil.
- ✓ Created in 1987, the SportCom program is offered in partnership with the CFJ school of journalism.
 - Its content and approach are particularly well suited to the needs of the job market and provide the flexibility required to continue training as an elite athlete.
- ✓ INSEP also offers on-site foreign language courses (English, German, Italian, Russian and Spanish), which are very popular with athletes because they are directly applicable for the career expectations of elite athletes.



OFF-SITE

INSEP has developed partnership agreements with a number of institutions (universities, nursing college, physiotherapy school, engineering school, university institute of technology, etc.) throughout France to effectively meet athletes' aspirations.

Timetables are adapted and courses can be tailored to individuals and spread over several years in line with the profiles and constraints of each athlete. Each year, new courses are added to the range of training offered by INSEP.

Today, elite athletes can ask INSEP about any type of training and an adapted response will be looked into and offered.



RETRAINING AND CAREER CHANGE

Preparations for the end of a career start far upstream, at least one year before the planned end date.



INSEP 's Elite Athlete Training and Support unit works closely with INSEP's Psychology unit to offer the opportunity for an end-of-career psychological assessment for each athlete who requests this.

As part of their employment, retraining or career change support measures, current or former elite athletes are given an interview to help them with their professional integration steps.

Developing skills assessments and transition support (coaching, mentoring, self-confidence exercises, etc.).

Athletes are offered work placements, internships or job opportunities when this can help them with their career development plans.



TRAINING OF STAFF

Supporting and training high-level executives is one of the missions entrusted to INSEP as a Public, Scientific, Cultural and Professional Establishment (EPSCP).

Its status gives it the capacity to training capacity. It assumes the role and status of the State's main operator in the training and support of high-level executives in line with the strategic orientations defined by the Ministry of Sports.



Trainings built by INSEP

-  Athletic dimension
-  Management dimension
-  Human dimension
-  Training and high performance dimension
-  Technological and scientific dimension
-  Social dimension



1 Executive Master

6 Certificates
Ex: « mental dimension & performance »,
« performance analyst »...

Trainings without certificate
(9 modules, 2 professionalisation days, 2 co-coaching groups)



Professional trainings and university courses in INSEP

- ➔ DESJEPS - State diploma in youth, popular education and sport for high executives and coaches in elite sport
- ➔ Master's degree EOPS "Training and optimizing sports performance" in partnership with Paris Cité University



**INSTITUT NATIONAL DU SPORT,
DE L'EXPERTISE ET DE LA PERFORMANCE**

11, avenue du Tremblay - 75012 PARIS
Tél. : 01 41 74 41 00

www.insep.fr








**University Paris Est Créteil
Faculty SESS-STAPS and laboratory LIRTES**

Plan de l'exposé

1. **STAPS Department**
2. Laboratory LIRTES
3. Research in sport coaching and PE
4. Funding for Phd in sport



**S.T.A.P.S. – UPEC
Knowledge & action**



Jérôme FRIGOUT, Université Paris Est Créteil, LIRTES



Studies

- ▶ **STAPS – physical education, sport performance & management, physical activity and health**
 - ▶ Licence (3 years)
 - ▶ Master (+ 2 years)
 - ▶ PhD (+ 3-6 years, depending on the observation methods)
- ▶ **STAPS – physiotherapy**
 - ▶ Licence (1 years) + 4 years in partner schools
- ▶ **STAPS – medicine**
 - ▶ Licence (1 years) + 8 years in the UPEC medicine school

Training Programs

- ▶ **STAPS – (i) physical education, (ii) sport performance & (iii) management, (iv) physical activity and health (Licence – Master – PhD)**
 - ▶ **Sport performance** – partnership with the INSEP for the Licence (third year) – Master EOPS (performance optimisation) for video analysis and mental preparation.
 - ▶ **Sport management.**
 - ▶ **Physical education** (formation for sport teachers for primary, elementary, high-school and college).
 - ▶ **Physical activity and health** – in regard to the Health Law application (2016), formation of physical educators in order to work with doctors et physiotherapists in health centers.

Partnerships (approvals and agreements)

- ▶ **INSEP** – National Sport Performance Center (3rd year of Bachelor)
- ▶ **ASM** rugby and omnisports (Elite club of Clermont Ferrand)
- ▶ **US Créteil handball** (Elite club)
- ▶ **Cardiff Metropolitan University (Sport coaching)**






Plan de l'exposé

1. STAPS Department
- 2. Laboratory LIRTES**
3. Research in sport coaching and PE
4. Funding for Phd in sport

7

Four identity elements

- Interdisciplinarity as a resource for studying complex objects
- Complementary macro/meso/micro approaches, on the context and actors of these transformations
- A strong social utility, through field concerns and collaborative research with practitioners
- A central interest in education and training in different sectors (teaching, training, care professions, social intervention)

Three themes

- Experience, training, contextualized learning (EFAC)
- Social intervention(s): actors, territories, policies (ISPAT)
- Public problems, articulation of social relations and prevention in the face of inequalities in education (PARSIE)

Team

- Director : Perrine ROBIN perrine.robin@u-pec.fr
- Assistant director : Nathalie Carminatti Nathalie.carminatti@u-pec.fr
- 41 researchers (6 full professors, 35 readers)
- 6 emerite professors and 18 associated researchers
- 46 doctorate students and 15 doctors (PHD)

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11

Alain Mouchet (full professor, previous dean of LIRTES)

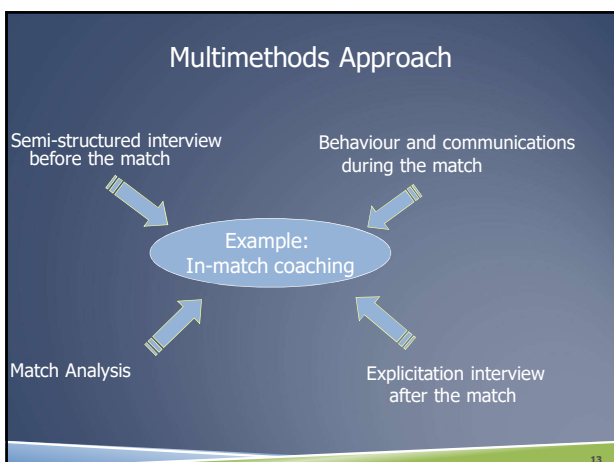
Decision-Making in urgent and complex situations

In-competition Coaching



Agreements and research contracts with unions and clubs, or informal collaboration (master students)

12



- ### Some characteristics
- Empirical studies in ecological context
 - Collaborative research with practitioners : strong relations between research and training
 - An interest for the subjective-lived experience of coaches, athletes, teachers = their 'feeling'
 - Expertise in explication interview and psychophenomenology

- ### Aïmen Khacharem
- (Reader, leader of Master 1 Sport coaching)
- My research aims to:
- Examine the impact of varying image presentation formats (**static** vs. **dynamic**) on the acquisition and learning of motor and tactical skills.
 - Explore how **individual differences**, such as expertise level and spatial abilities, influence these effects.
- 15

What **perceptual and cognitive mechanisms** underlie the process of learning through visual images ?

1/ **Experimental methods**
(eye tracking, temporal and spatial occlusion paradigms, etc.)

2/ **Qualitative methods**
(interviews, verbalisations, etc.)

16

- ### Olivier Degrenne
- Researchs Focused On Performance Analysis & Sports Coaching
 - In Charge Of The Specialty « Performance Analysis » In Sport Coaching Master's Degree
 - Volleyball Coach At National Level
 - Performance Analyst In Elite Football Academy
- 17



frontiers
in Psychology

Jerôme Frigout – example 1 published in 2020

Strategy and Decision Making in Karate

Karate will be included in the 2020 Summer Olympics in Tokyo as an additional sport. The inner logic of this activity includes a specific scoring system and way of modeling. Three hundred and nine bouts were observed in the competition context, which resulted in new perspectives on training and competition. The scoring of punches (43.7% of total scored points) and face kicks (37.9%) appears to be more significant ($p \leq 0.01$) than that of body kicks (15.3%, $p \leq 0.01$) and leg-sweeping (3.1%, $p = 0.31$). Penalties appear to be very significant and associated with victory when "scored" by the competitor against himself or herself ($p \leq 0.01$). Competitors must score points and penalties. This zero-sum game induces a simple rivalry, whose purpose is domination and which must rely on a predefined strategy and initiative. Karatekas have to make decisions, such as when taking the risk to score points and penalties, whether or not they lead the score. Karatekas may decide to expose or protect themselves, create situations, or simply remain realistic and adhere to the plan. The question of decision making, which is central to this work, forces us to focus our future work on the notions of expectations and self-fulfilling prophecies.

Keywords: karate, modeling, inner logic, strategy, decision making

19

Decision Making in Karate

- ▶ What is *karate* (fighting / *kumite*) about ?
- ▶ In order to model the competitive practice, what did we decide to observe ? The referee at the center of our study
- ▶ Our results ?! Surprising...
- ▶ In order to perform, it is absolutely necessary to score points (indeed) and penalties (again myself)
- ▶ Preconisations for coaches and competitors – what is it yet to score (points / penalties) ?

Olympika
The International Journal of Olympic Studies

The costs of the Paris 2024 Olympic Games: Evolution and analysis

An analysis of the evolution of the costs of the Paris 2024 Olympic Games, since the bid was put together and the financial stakes were raised in 2016, reveals significant inflation, ranging from €3.999 billion to €12.6 billion (at the end of 2021). Between a truncated systemic vision and a false initial budget, these Olympic Games' costs again appear to have been systematically underestimated, under the guise of rationality and responsibility. The problem of the Public-Private Partnerships implemented in the city contract for the Paris Games is said to be one of the sources of the "winner's curse". Once again, these Olympic Games seem to set aside the social function of sport.

The costs of the Paris 2024 Olympic Games: Evolution and analysis

- ▶ **The GESI – history, attribution. What about Paris 2024?**
- ▶ **The bid and its financial implications. Between a truncated systemic vision and a false initial budget**
- ▶ **Costs systematically underestimated under the guise of rationality and responsibility**
- ▶ **The PPP issue as the source of the "winner's curse"?**
- ▶ **The Olympic Games and the social function of sport**

22

Didactique clinique de l'EPS
LE HAUT COMMISSARIAT AU SPORT

Nathalie CARMINATTI
Clinical didactics of PE

Didactique clinique de l'éducation physique et sportive (EPS)
Sous la direction de
Nathalie Carminatti, Professeure de l'Université de Bourgogne

Observations of teaching practices

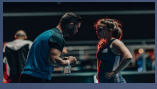
Study areas

Trainer training

Physical education

Training future teachers

3 thesis funded through CIFRE



Sophie Barre -Emotional competencies in coach/athlete relationships in wrestling (FFLDA)



Baptiste Fleureau – Intersubjectivity in Coach communications during practice (Rugby Club Orsay)



Amandine Vahé –Referees' DM in match (FFHB)

salary + extra costs (travelling, congresses...)

31

Some answers to your last 3 questions

1. How UPEC collaborate with sport professionals to link research and concrete practice?
2. Are there some financial ressources or collaborations connected to the Olympics in Paris ?
3. Are there any studies concerning collaboration with physiotherapists?

32