

孫志陸 教授

研究室：國立台灣海洋大學海洋中心

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學歷

國立台灣海洋學院(大學)漁業系理學士

國立臺灣大學海洋研究所海洋生物及漁業碩士

美國佛州邁阿密大學海洋生物及漁業博士

經歷

國立臺灣大學海洋研究所講師

國立臺灣大學海洋研究所副教授

國立臺灣大學海洋研究所教授兼海洋生物及漁業組主任

國立臺灣大學海洋研究所教授

現任職務

國立臺灣海洋大學講座教授

國立臺灣大學海洋研究所兼任教授

國立臺灣大學漁業科學研究所兼任教授

北太平洋鮪類及類鮪類國際科學委員會副主席

參加學術團體

台灣漁業永續發展協會 (理事、常務理事)

台灣國際漁業發展保育協會 (理事)

台灣水產學會 (理事、常務理事、常務監事)

台灣水產協會 (理事)

Asia Fisheries Society -- (Founding member)

The American Institute of Fishery Research Biologists -- (Fellow)

American Fisheries Society -- (Certified Scientist)

專業領域

漁業生物學、資源評估、漁業管理

研究興趣

鮪旗魚的族群動態以及資源評估

基本漁業生物學研究(包括年齡與成長以及生殖生物學等)

環境因子與漁業資源豐度之關係

甲殼類族群動態及資源評估

教學

水產資源學特論

水產資源學

漁業資訊解析

電腦在漁業資源評估之應用

論文指導：

指導博士班研究生 14 人，其中已畢業 11 人；碩士班研究生 41 人，均已畢業。畢業學生有任教海洋大學及高雄海洋科技大學，也有服務於水產試驗所、漁業署、縣市水產課，以及漁會、漁業公司等，大都表現優異，使得漁業專業知識得以傳承，對漁業界的服務得以繼續。

畢業學生論文

博士

江偉全 2004 台灣東部海域雨傘旗魚族群動態及資源評估

王勝平 2004 北太平洋劍旗魚之性別-年齡結構模式及資源評估

蘇楠傑 2010 太平洋黑皮旗魚空間性別年齡結構模式及資源評估

張以杰 2011 台灣東部海域密毛龍蝦資源評估研究

曾振德 2012 衛星影像應用於臺灣秋刀魚漁業之漁海況變動研究

謝其衡 2013 北大西洋長鰭鮪資源評估

連永祥 2013 中西北太平洋紅肉旗魚時空分布與資源評估

蔡文沛 2014 利用雙性別模式進行西北太平洋海域灰鯖鮫之資源評估與管理(與海大海洋事務與資源管理研究所劉光明教授共同指導)

蔡政南 2014 台灣東部海域雨傘旗魚之食物階層結構研究

李惠婷 2014 探討褐藻小海帶抑制人類癌細胞生長(與台大海洋所黃穰教授共同指導)

陳 卉 2015 黑皮旗魚在太平洋及東印度洋之族群遺傳結構和族群變動史(與中央研究院邵廣昭研究員共同指導)

碩士

王勝平 1999 臺灣海域劍旗魚之年齡與成長研究

黃建龍 1999 西太平洋大目鮪之年齡與成長研究

朱淑玲 1999 西太平洋大目鮪之生殖生物學研究

陳炳仲 2001 西太平洋黑皮旗魚之年齡成長研究

曾建中 2002 西太平洋黑皮旗魚生殖生物學研究

- 戴川淵 2002 以 MULTIFAN 體長頻度分析法估計西太平洋黑皮旗魚之年齡、成長及死亡率
- 林筱齡 2003 利用耳石估算台灣海域劍旗魚幼魚的日齡與成長
- 蘇楠傑 2003 台灣近海鮪延繩釣漁業黃鰭鮪的年齡、成長、死亡率與單位加入生產量
- 陳之婕 2004 利用耳石研究中西太平洋我國經鮪圍網漁獲正經的年齡與成長
- 邱文毓 2004 台灣近海鮪延繩釣黃鰭鮪資源分布與海洋環境因子關係之探討
- 林富家 2004 台灣東部海域與中西太平洋正經之年齡與成長研究
- 傅信欽 2004 中西太平洋與台灣東部海域正經之生殖生物學研究
- 王尉任 2005 西太平洋黃鰭鮪生殖生物學研究
- 劉嫻妤 2005 以台灣近海鮪延繩釣漁業大目鮪體長資料估計其年齡、成長與死亡率以及單位加入量分析
- 陳郁凱 2005 以台東沿海密毛龍蝦之體長資料估計其年齡、成長與死亡率以及單位加入生產量分析
- 張以杰 2005 台東沿海密毛龍蝦生殖生物學研究
- 張伊坊 2006 台灣東部海域鬼頭刀的日齡與成長之研究
- 劉建賢 2006 台灣東部海域白皮旗魚之年齡與成長研究
- 劉宗昀 2007 台灣海域與南中國海白皮旗魚之生殖生物學研究
- 胡雅婷 2007 利用多重影像解析中西北太平洋過渡區葉綠素鋒面與經竿釣漁業正經資源分布關係之研究
- 傅以承 2007 台灣南部珊瑚礁海域兩種固齒雀鯛食性適應性之研究 - 利用胃內含物和穩定同位素分析 (與中研院詹榮桂研究員共同指導)
- 曾以中 2007 台灣產鯖科魚類之親緣關係與花鰹屬仔魚之鑑別 (與水試所王友慈博士共同指導)
- 李倉名 2008 台灣東部海域竹節鰭生活史參數與生物參考點之估計及相關未確定性分析
- 方惠平 2008 台灣東部海域白皮旗魚生活史參數與生物參考點之估計及相關未確定性分析
- 詹麗華 2009 利用耳石探討台灣東部海域竹節鰭的年齡與成長
- 曾淑芳 2009 台灣東部海域竹節鰭之生殖生物學研究
- 黃盈璋 2009 台灣東部海域密毛龍蝦之脫殼成長研究
- 陳惠貞 2010 中西太平洋大目鮪之豐度指標標準化及資源評估
- 蔡素甄 2010 利用生命條碼進行台灣周邊海域柳葉鰻之分類研究 (與中研院邵廣昭研究員共同指導)
- 許文聲 2010 台灣海域紅肉旗魚之年齡與成長研究
- 吳維章 2010 應用年齡結構生產量模式進行南大西洋劍旗魚之資源評估
- 張筱筠 2011 台灣海域紅肉旗魚之生殖生物學研究
- 魏劭先 2011 低魚粉及零魚粉飼料對黃錫鯛成長之影響(與台大漁科所廖文亮副

教授共同指導)

- 蔡易霖 2012 大西洋黑皮旗魚之豐度指標標準化及資源評估
張芸甄 2013 利用穩定同位素分析探討臺灣東部海域旗魚之食物階層動態(與水試所江偉全博士共同指導)
石涓銘 2013 仔稚魚短期群聚組成變動及採樣設計相關性研究:以淡水河口為例(與中研院邵廣昭研究員共同指導)
陳柏沅 2014 中西太平洋大型洄游魚類生態風險評估
張惟寧 2014 飼料中添加北蟲草培養米基(菌絲體)對點帶石斑的成長與免疫之影響(與台大漁科所廖文亮副教授共同指導)
黃鈞淳 2015 台灣東部海域齒鰭之生殖生物學研究
何昱宣 2015 台灣東北海域齒鰭之年齡與成長研究
黃彥融 2015 日本鰻早期人工誘導對卵巢發育影響之研究(與台大漁科所羅秀婉副教授共同指導)

榮譽與服務

- 榮獲當選(2011-2014 三年一任)及連任(2014-2017)北太平洋鮪類及類鮪類國際科學委員會(ISC)副主席；
榮獲當選國立臺灣海洋大學 102 年度傑出校友(2013)；
榮膺美國漁業研究生物學家研究院之會士 (Fellow of the American Institute of Fishery Research Biologists) (自 2003 年起迄今)；
榮膺美國 American Fisheries Society 之 Certified Scientist (自 1990 年起迄今)；
榮獲國立臺灣大學 97、98、100、101、102、103 年度學術研究績效獎勵 (尤其 101 年度榮獲 3 篇傑出及 4 篇優良著作獎；103 年度榮獲 3 篇傑出及 1 篇優良著作獎)；
榮獲 101 年度國立臺灣大學績優教研人員獎；
連續 14 年 (91 至 104 年度) 獲國科會計畫主持費獎及研究經費補助。
多次擔任考選部高普考、地方特考命題、閱卷及口試委員(2010 至 2014 年)；
長期擔任國科會研究計劃初審委員；
長期擔任漁業署研究計畫審查委員；
長期擔任水試所研究計畫審查委員；
多次擔任農委會研究計畫審查委員；
擔任教育部 103 年度公費留考面試委員(2014)；
擔任教育部 103 年度國內大學與國外大學合作辦理學位專班計劃書書面及會議審查委員(2014)；
擔任國發會 103 年度研究成果審查委員(2014)；
擔任國科會 103 年度計劃申訴覆審委員(2014)；
擔任海大環漁系 103 年度自我評鑑系級委員兼召集人(2014)；
擔任高雄海洋科技大學漁業生產與管理系 103 年度內部自我評鑑委員兼召集人

(2014)；

擔任台灣區鮪魚輸出業同業公會第 15 屆顧問 (2011/3-2014/3)

擔任台灣漁業永續發展協會理事(2002-2008)、常務理事(2008-2016)；

擔任台灣國際漁業發展保育協會理事 (2007-2016)；

擔任台灣水產學會理事(2005-2006; 2011-2012)、常務理事(2013-2014)、常務監事
(2015-2016)；

擔任台灣水產協會理事 (2009 迄今)；

擔任行政院農委會水產試驗所水產研究期刊諮詢委員(2004-2012/3)；

擔任北太平洋鮪類及類鮪類國際科學委員會第 11 屆年會(ISC11) 我國代表團團
長(2011)；

擔任中西太平洋漁業委員會(WCPFC)科學次委員會(SC)生物學專家工作小組主
席 Biology Specialist Working Group, WCPFC-SC (2005-2007)；

擔任世界漁業大會(World Fisheries Congress)國際諮詢委員會(International
Advisory Council)委員(2004 年迄今)；

擔任太平洋共同體秘書處鮪旗魚常設委員會第 16 屆年會(SCTB16)我國代表團團
長(2003)；

擔任太平洋共同體秘書處(Secretariat of Pacific Committee, SPC) 鮪旗魚常設委員
會(SCTB)大目鮪研究小組主席(2001-2002)；

擔任下列國際知名 SCI 學術期刊評審委員

Canadian Journal of Fisheries and Aquatic Science (2010, 2011, 2013)；

Fisheries Research (2009, 2010, 2011, 2012, 2013, 2014)；

Journal of Fish Biology (2010, 2013, 2014)；

Marine Ecology Progress Series (2012)；

Marine and Freshwater Research (2003, 2007, 2010)；

ICES Journal of Marine Science (2009)；

Deep Sea Research II (2012)；

International Journal of Remote Sensing (2011)；

Marine Biology Research (2010, 2012)；

Fishery Bulletin (2002, 2004, 2007, 2008, 2009, 2011, 2012)；

Bulletin of Marine Science (2011)；

Fisheries Science (2011)；

Environmental Biology of Fishes (2008, 2010)；

Journal of Crustacean Biology (2009)；

New Zealand Journal of Marine and Freshwater Research (2008)；

North American Journal of Fisheries Management (2008)；

Aquatic Living Resources (2008)；

Journal of Sea Research (2008)；

Hydrobiologia (2008)；

The Raffles Bulletin of Zoology (2006) ;
Journal of Marine Science and Technology (2012, 2013) ;
Acta Ichthyologica et Piscatoria (2013) ;

擔任美國夏威夷大學“遠洋漁業研究計劃 Pelagic Fisheries Research Program”的
計劃審查人 (2002, 2010) ;

擔任 International Fishery GIS Society 所出版 Proceedings of the Fourth International
Symposium on GIS/Spatial analyses in Fishery and Aquatic Sciences 之 Reviewer
(2009) ;

擔任國際著名書商 John Wiley & Sons, Inc. 新書“Fishes of the Open Ocean”之 book
reviewer (2007) ;

主辦 ISC 旗魚工作小組會議(2017/6/1-6) ;

主辦漁業資源國際研討會(2015/6/29-7/1) ;

主辦第五屆國際旗魚研討會(2013/11/4-8) , 並擔任該研討會專輯(Fisheries
Research, Vol. 166)的 guest editor 之一 ;

主辦 ISC 旗魚工作小組會議(2011/5/24-6/1) ;

主辦鮪旗魚標識放流國際研討會(2010/11/7-12) ;

主辦太平洋旗魚國際研討會(2007/6/4-9) ;

主辦 ISC 旗魚及劍旗魚工作小組聯合會議(2007/3/19-26) ;

學術研究

2001 年迄今共發表 200 多篇科學論著 (包括約 70 篇期刊論文, 130 多篇研討會
論文及專刊), 其中約 60 篇為 SCI, 發表在國際知名之漁業及生物學領域期刊,
如: Reviews in Fish Biology and Fisheries, Canadian Journal of Fisheries and Aquatic
Science, Fisheries Oceanography, Journal of Experimental Biology and Ecology,
Journal of Fish Biology, ICES Journal of Marine Science, Marine and Freshwater
Research, Fisheries Research, Deep-Sea Research II 等等, 以及頂尖之 SCIENCE
期刊 ;

著作目錄 (since 2001)

A. 期刊論文(Peer Reviewed Journal Papers) (* Corresponding author):

Chang, H.Y., C.L. Sun*, S.Z. Yeh, Y.J. Chang, N.J. Su, and G. DiNardo, 2017.
Reproductive biology of female striped marlin *Kajikia audax* in the western
Pacific Ocean. Journal of Fish Biology (under review).

Su, N.J. and C.L. Sun, 2017. CPUE Standardization of sailfish (*Istiophorus
platypterus*) for the Chinese Taipei distant-water longline fishery in the Atlantic

Ocean. SCRS/2016/102. Collect. Vol. Sci. Pap. ICCAT, 73(5): 1824-1839.

- Chen, H., C.H. Chang, C.L. Sun*, K.T. Shao, S.Z. Yeh, and G. DiNardo, 2016. Population Structure of Blue Marlin, *Makaira nigricans*, in the Pacific and Eastern Indian Oceans. *Zoological Studies* 55: 33 (2016). doi:10.6620/ZS.2016.55-33.
- Su, N.J., C.L. Sun, C.Y. Tai, and S.Z. Yeh, 2016. Length-based estimates of growth and natural mortality for blue marlin (*Makaira nigricans*) in the northwest Pacific Ocean. *Journal of Marine Science and Technology*, 24(2): 370-378.
- Madigan, D.J., W.C. Chiang, N.J. Wallsgrave, B. N. Popp, T. Kitagawa, C. A. Choy, J. Tallmon, N. Ahmed, N.S. Fisher, C.L. Sun, 2016. Intrinsic tracers reveal recent foraging ecology of giant Pacific bluefin tuna at their primary spawning grounds. *Marine Ecology Progress Series* Vol. 553: 253–266. doi: 10.3354/meps11782.
- Sun*, C.L., S.Z. Yeh, C.S. Liu, N.J. Su, and W.C. Chiang, 2015. Age and growth of Black marlin (*Istiompax indica*) off eastern Taiwan. *Fisheries Research*, 166, 4-11. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.09.005>
- Sun*, C.L., H.Y. Chang, T.Y. Liu, S.Z. Yeh, and Y.J. Chang, 2015. Reproductive biology of the black marlin, *Istiompax indica*, off southwestern and eastern Taiwan. *Fisheries Research*, 166, 12-20. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.09.006>
- Tsai, C.N., W.C. Chiang, C.L. Sun*, K.T. Shao, S.Y. Chen, and S.Z. Yeh, 2015. Stomach content and stable isotope analysis of sailfish (*Istiophorus platypterus*) diet in eastern Taiwan waters. *Fisheries Research*, 166, 39-46. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.10.021>
- Su, N.J., C.L. Sun*, A.E. Punt, S.Z. Yeh, and G. DiNardo, 2015. Environmental influences on seasonal movement patterns and regional fidelity of striped marlin *Kajikia audax* in the Pacific Ocean. *Fisheries Research*, 166, 59-66. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.07.017>
- Chiang, W.C., M.K. Musyl, C.L. Sun*, G. DiNardo, H.M. Hung, H.C. Lin, S.C. Chen, S.Z. Yeh, W.Y. Chen, and C.L. Kuo, 2015. Seasonal movements and diving behaviour of black marlin (*Istiompax indica*) in the northwestern Pacific Ocean. *Fisheries Research*, 166, 92-102. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.10.023>
- Punt, A.E., N.J. Su, and C.L. Sun, 2015. Assessing billfish stocks: A review of current methods and some future directions. *Fisheries Research*, 166, 103-118. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.07.016>

- Chang, Y.J., J. Brodziak, J. O'Malley, H.H. Lee, G. DiNardo, and C.L. Sun, 2015. Model selection and multi-model inference for Bayesian surplus production models: A case study for Pacific blue and striped marlin. *Fisheries Research*, 166, 129-139. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.08.023>
- Brodziak, J., M. Mangel, and C.L. Sun, 2015. Stock-recruitment resilience of North Pacific striped marlin based on reproductive ecology. *Fisheries Research*, 166, 140-150. **SCI** <http://dx.doi.org/10.1016/j.fishres.2014.08.008>
- Musyl, M.K., C.D. Moyes, R.W. Brill, B.L. Mourato, A. West, L.M. McNaughton, W.C. Chiang, and C.L. Sun, 2015. Postrelease mortality in istiophorid billfish. *Canadian Journal of Fisheries and Aquatic Sciences*, 72(4), 538-556. **SCI** <http://dx.doi.org/10.1139/cjfas-2014-0323>
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