

5GH Foundation



5GH-WuGH-20240220.001

Abnormal Patterns in HAO Dingjun's Papers

Before the Year of Loong, a paper [1] published by HAO Dingjun's team at Xi'an Jiaotong University attracted global attention, not because the team made a major breakthrough, but because they inappropriately used AI tool to fabricate images in the paper. Subsequently, the paper was retracted by the journal.

After that, the 5GH team conducted a screening of papers published by HAO Dingjun, the corresponding author of Ref [1], and found multiple abnormal patterns.

(1) Huge Number of Publications

The 5GH team identified 41 papers which were published by HAO Dingjun and his co-authors in 2023 (two were actually published in January 2024), with an average of 0.75 (39/52) papers published per week. Considering that some articles may not be listed on Google Scholar, the number of papers published by HAO Dingjun's team per week might be close to the order of 1, an extremely high number.

5GH team accessed to and further investigated 28 of the 41 papers mentioned above (highlighted in yellow).

DOI/ID	Journal	Authors	Funding	Ethical Approval	Submitted	Accepted	Published	Contribution	E-mail for HAO
10.1186/s13047-023-04358-4	Journal of Orthopaedic Surgery and Research	Yadong Zhang, Houshan Li, Wentao Wang	MANNFC: 81830077	Without Grant Number	20230809	20231108	20231120	designed the study and crit	haodjgml@163.com
10.1186/s13047-023-04813-6	Scientific Reports	Jinfa Li, Shaobo Wu, Xueyan Bao, Shi	With Grant Number	20230923	20231106	20231110	conceptualization and proc	haodjgml@126.com	
10.1021/acscbiomaterials.3c01048	ACS Biomaterials Science & Engineering	Hailiang Xu, Zheng Gao, Zhiyuan Wang	Not Disclosed	Not Disclosed	20230731	20231016	20231103	Conceptualization, Method	Not Provided
10.1021/acscnano.2c12017	ACS Nano	Wendong Wu, Shuangjin Jia, Hailiang Xu	Not Disclosed	Not Disclosed	20221203	20230208	20230214	Conducted the review, data	haodjgml@163.com and Offi
10.1111/jmm.13054	Journal of Cellular and Molecular Medicine	Chao Jiang, Yuyang Liu, Yongqiang Zhao	STC of Xian 21YXYJ014	Cell Experiment	20230425	20231030	20231114	Writing - review and editing	qin@haodjgml@126.com
10.1016/j.jbion.2022.108133	Nano Energy	Botao Li, Shuangjin Jia, Zhiyuan Wang	MANNFC: 81891003, 8183	Without Grant Number	20221109	20221221	20221226	Conceptualization, Supervi	hao_dingjia@163.com
10.1016/j.jbion.2023.101894	Nano Today	Zhiyuan Wang, Shuangjin Jia, Hailiang Xu	MANNFC: 81891003, 8183	Without Grant Number	20230111	20230602	20230619	Conceptualization, Resourc	Official E-mail Address
10.1016/j.jbion.2023.101894	Pain Physician	Xin Chai, Harren Xu, Ying Yao, Jun-Sci	With Grant Number	20220518	20220824	20220919			
10.1016/j.jbion.2023.101894	Scientific Reports	Jinfa Li, Shaobo Wu, Xueyan Bao, Shi	MANNFC: 81830077, 8207	Without Grant Number	20230710	20230821	20230901	Methodology, Project admi	haodjgml@163.com
10.1111/on.13816	Orthopaedic Surgery	Yadong Zhang, Wentao Wang, Lulu Bai	MANNFC: 81830077	Without Grant Number	20230221	20230608		designed the study and crit	haodjgml@126.com
10.1111/on.13899	Orthopaedic Surgery	Yadong Zhang, Houshan Li, Wentao Wang	MANNFC: 81830077	Without Grant Number	20230628	20230820		designed the study and crit	haodjgml@163.com
10.1007/s11481-023-10081-y	Journal of Neuroimmune Pharmacology	Chao Jiang, Zhe Chen, Xiaohu Wang	MANNFC: 81830077, 8207	Without Grant Number	20230117	20230802	20230902	Conceived the experiments	Official E-mail Address
10.1016/j.cytb.2023.150134	Cytokine	Huimin Hu, Yadong Zhang, Yanmei	No Financial Support	Not Disclosed	20220424	20230112	20230215	Not Mentioned	haodjgml@outlook.com
10.1186/s12891-023-07002-8	BMC Musculoskeletal Disorders	Yuyang Zhang, Xu Chen, Yuan Xiao, SSN	YSSP for HT of Shaanxi, SH	Cell Experiment	20230823	20231030	20231129	Conceived the idea, Rader	Official E-mail Address
10.1016/j.jbion.2023.1017192	Front. Biomed. Biotechnol.	Yi Zhan, Chang Bao, Huiqing Yang, Lai	KRDP: 2020GXLM-Y-00	Not Disclosed	20221022	20230509	20230518	Conceptualization	dingjunhao@163.com
10.1016/j.jbion.2023.1017192	Hydrox	JiPeng Du, Xiangcheng Gao, Dingjun	ISTC of Xian 21YXYG00	With Grant Number	20230222	20231018	20231023	Software, Resources, M	Not Provided
10.1016/j.jbion.2023.1017192	Materials Today Bio	Ying Zhang, Hailiang Xu, Jun Wang, Xu	MANNFC: 81830077, NSF 6	Not Disclosed	20230126	20230404	20230407	Conceptualization, Method	Official E-mail Address
10.1007/s00222-023-01176-y	Calcified Tissue International	Shiyuan Liu, Shaobo Wu, Xueyan Bao	With Grant Number	20231117	20231119	20240123			
10.3389/fimg.2023.1031547	Front. Surg.	Xiangcheng Gao, JiPeng Du, Yunfei Hu	MANNFC: 81830077, NSF 20	Not Disclosed	20220830	20221222	20230207	analyzed the data	Not Provided
10.1097/CORR.0000000000002542	Clinical Orthopaedics and Related Resea	Bai Hiao, et al.	HKPNNSBRP of Shaanxi 20	Not Disclosed	20220830	20221222	20230207	analyzed the data	Not Provided
10.1007/s12034-023-0222-0	Molecular Neurobiology	Xia Hu, Ya'an Zhang, Yunshan Guo, X		Not Disclosed	20220613	20230104	20230119		
10.1222/cm.0000000000000702	Operative Neurosurgery	Yang Kai, Feng Chaoshan, Zheng Bole	No Financial Support	Without Grant Number	20230112	20230202	20230421	Not Mentioned	Official E-mail Address
10.1097/BRS.0000000000004553	Spine	Ye Yu-Xiang, Huang Da-Geng, Hao Di	Not Mentioned	Finite element analysis				Not Mentioned	Not Provided
10.7507/1002-1892-202307021	中国肿瘤临床杂志	陈耀宇, 王文涛, 余海平, 李博博, 薛			20230905	20230929	20231004	professional advice and v	1310301542@bjmu.edu.cn
10.3390/biom11102701	Biosensors	Yifang Gong, Dingjun Hao, Yong Zhang	INSFC: 82260181, 820709	With Grant Number	20230130	20230418	20230515		
PMID: 37103634	Am J Transl Res	Shuai Li, JiPeng Du, Yunfei Huang, Di	MANNFC: 82260181, 820709	Without Grant Number	20221111	20230220		Not Mentioned	haodjgml@163.com
10.1111/cpr.13438	Cell Proliferation	Zhengwei Sha, Lei Zhan, Zong-rang Song	MANNFC: 82171379	Without Grant Number	20221117	20230220		Not Mentioned	haodjgml@163.com
中国组织工程研究, 2023, 27(3)	中国组织工程研究	詹乙, 王彪, 马宇立, 何思敏, 孙宏			20221107	20230920	20230923	designed the methods of th	Not Provided
10.1016/j.jbion.2023.1017192	Scientific Reports	Shuai Li, JiPeng Du, Yunfei Huang, Di	KRDP of Shaanxi 2023JH	With Grant Number	20221003	20230627	20230714		
10.1007/s12034-023-0222-0	Molecular Neurobiology	Xia Hu, Ya'an Zhang, Yunshan Guo, X		Not Disclosed	20220613	20230104	20230119		
10.1016/j.pha.2023.09.013	Journal of Pharmaceutical Analysis	Ding-Jun Hao, Yue Qin, Shi-Jie Zhou, Sha	NSF: 2021JM-56	With Grant Number	20230407	20230918	20230922	Not Mentioned	Not Provided
10.1007/s00264-023-0809-7	International Orthopaedics	Xiangcheng Gao, JiPeng Du, Dingjun	MANNFC: 82260181, KPN	Without Grant Number	20230315	20230405	20230419	software, data collection	Not Provided
10.3389/fimmu.2023.1276445	Front. Immunol.	Xinyu Guo, Chao Jiang, Zhe Chen, Xiao	No Financial Support	Without Grant Number	20230812	20231011	20231108	Writing - review & editing	Official E-mail Address
10.3389/fimmu.2023.1280481	Frontiers in Neurosciences	Xinyu Guo, Chao Jiang, Yongjie Zhang	No Financial Support	Without Grant Number	20230806	20230925	20231016	Writing - original draft, Fo	Official E-mail Address
10.3389/fimg.2022.1056729	Front. Surg.	Guo Xinyu, Zhu Na, Zhang Haihong, Ha	Not Mentioned	Without Grant Number	20220929	20221208	20230110	edited the figures and ta	redresshaodj@126.com
10.3389/fcell.2023.1339390	Frontiers in Cell and Developmental Biolo	Xinyu Guo, Liang Dong, Dingjun Hao	No Financial Support	Without Grant Number	20221117	20231228	20240113	Investigation, Writing - r	haodjgml@163.com
10.12307/2023.001	中国组织工程研究	詹乙, 王彪, 马宇立, 何思敏, 孙宏			20221107	20230920	20230923	designed the methods of th	Not Provided
10.3760/cm.j.cn10120.2022.20820	中华解剖与临床杂志	孙楠, 单承群, 曹文, 郝定邦							

(2) "Disposable E-Mail"

The most notable pattern is the use of non-institutional e-mail. Among these 28 papers, 7 did not show HAO's e-mail address, 8 showed institutional e-mail address to HAO, and 14 showed non-institutional e-mail address to HAO (one of them showed both HAO's institutional and non-institutional e-mail address).

The total number of these non-institutional e-mail address is 13, 3 of which were used twice, and the remaining 10 accounts were used once and are defined as "Disposable E-Mail".

The use of "Disposable E-Mail" often indicates a role of paper mill. Commercial companies, known as "paper mills", produce papers and submit them to the journals on behalf of the authors. In this process, they use the newly registered e-mail address in the submission process.

There is currently no direct evidence that HAO's paper came from paper mills, but one of e-mail address (1310301542@bjmu.edu.cn) seems particularly suspicious. Currently, the 5GH team is conducting further investigation on this paper.

(3) Lack of Ethical Approval Disclosure

Among these 28 papers, except for a few reviews and cell studies, the vast majority are human or animal experiments (including questionnaire surveys, etc.). However, 6 of the papers did not disclose whether authors got ethical approval. In addition, 11 paper claimed that the authors obtained ethical approval, but did not disclose the registered numbers.

It is unclear whether journals required the ethical approval details from authors, or whether the authors failed to obtain the approval. Considering research teams often violate the ethical guidelines (including but not limited to: conducting experiments without obtaining ethical approval, inconsistency between ethical approval and experimental content, etc.), the 5GH team calls on publishers and stakeholders to disclose ethical approval details.

(4) Unreasonable Statement of Author Contribution

The 5GH team found that 3 papers had unreasonable author contribution statements, and 1 paper had unreasonable author ordering. These unreasonable statements of author contribution included claims that HAO (a highly qualified doctor/researcher) was engaged in chart production, software use, data collection, and literature research. In one article, HAO was listed as the first author, but not the corresponding author. This unconventional statement of author contributions and ordering is likely to indicate academic misconduct.

(5) No Fund

Among these 28 papers, 2 did not disclose funding information, and 5 stated that "no financial support was received for the research". However, HAO and his co-workers received a large number of funding from China agencies. It is worth noting that among the 4 papers co-signed by GUO Xinyu (the first author of Ref [1]) and HAO Dingjun (all published in Frontiers journals), no fund information was disclosed (3 stated that they had not received any fund support, and 1 did not disclose fund information).

Up to now, the 5GH team has no intention of making specific accusations against the above papers. However, considering the large number of the publications that may be involved in academic misconduct, the 5GH team calls for the participation from more institutions and individuals in order to promote the investigation faster.

[1] 10.3389/fcell.2023.1339390