



**Figure S1** Founding situation of youth scientists between China and America. (A) Scatterplot of the trend for total funding of the China Youth Scientists Fund from 2008 to 2019. (B) Scatterplot of the trend for total funding of the United States National Youth Science Foundation from 2008 to 2019.

**Table S1** Word frequency analysis results of NSFC-funded projects in lung cancer

Freq	Centrality	Sigma	PageRank	Keyword
12	0	1	0.96	EMY
12	0	1	0.78	Epithelium
12	0	1	0.6	Invasion
12	0	1	0.6	Lung cancer
12	0	1	0.6	Occurrence
9	0.01	1	1.34	DNA
9	0	1	0.87	EGFR-TKI
9	0	1	0.87	EGFR
9	0	1	0.69	Endothelial
9	0	1	0.6	Metabolism
9	0	1	0.6	Immune
9	0	1	0.6	Prostate cancer
9	0	1	0.6	Proliferation
6	0.33	1	3.66	Apoptosis
6	0.22	1	3.17	Clinic
6	0	1	0.51	lncRNA
6	0	1	0.51	Imaging
6	0	1	0.51	microRNA
6	0	1	0.51	Receptor
3	0	1	0.97	CT
3	0	1	0.97	China
3	0	1	0.51	Growth
3	0	1	0.42	Promotion
3	0	1	0.42	Genomics
3	0	1	0.42	Traditional Chinese Medicine
3	0	1	0.42	Notch
3	0	1	0.42	KRAS
3	0	1	0.42	Signaling Pathway
3	0	1	0.42	RNA

NSFC, National Natural Science Foundation of China.

**Table S2** Word frequency analysis results of NIH-funded projects in lung cancer

Freq	Burst	Centrality	Sigma	PageRank	Keyword
1,718		0.59	1	0	Cancer
1,174		0.31	1	0	Lung
283		0.03	1	0	Mechanism
275		0.03	1	0	Development
219		0.03	1	0	Therapy
197	4.24	0.07	1.31	0	Targeting
179	2.68	0	1	0	Treatment
178		0.03	1	0	Research
176		0.06	1	0	Imaging
171		0.02	1	0	Signaling
162		0.07	1	0	Clinical
158		0.01	1	0	Pulmonary
139		0.02	1	0	Breast
133		0.01	1	0	Inhibitor
111		0.01	1	0	Receptor
108		0.03	1	0	Therapeutic
100	3.82	0.03	1.12	0	Biomarker
94		0.04	1	0	Risk
89	2.89	0.01	1.02	0	Metastasis
78		0.02	1	0	Drug
75	10.5	0.03	1.36	0	Trial
69	15.7	0	1.08	0	Immune
66	4.8	0.02	1.1	0	Health
64		0	1	0	Screening
57	3.91	0	1.01	0	Injury
53	4.76	0.03	1.14	0	Care
53	10.14	0	1.01	0	Fibrosis
52	12.12	0	1.01	0	Small
50	11.06	0.03	1.38	0	Agent
48	12.32	0.01	1.16	0	Targeted
45	3.73	0.01	1.02	0	Tissue
40	13.05	0	1.05	0	Prostate
36	16.42	0.01	1.1	0	Resistance
35	16.67	0	1.08	0	IGF
35	16.67	0	1.08	0	OT
34	11.09	0	1	0	Carcinogenesis
31	10.1	0	1.02	0	Growth
29	9.45	0	1.02	0	Mouse
28	9.12	0.01	1.12	0	Phase
27	8.8	0	1.01	0	NSCLC
27	8.8	0	1.04	0	Training
27	11.63	0	1.01	0	Early
27	11.63	0.02	1.31	0	Diagnosis
26	8.47	0	1.02	0	Delivery
24	7.81	0	1.02	0	Vivo
24	7.81	0	1.02	0	Exposure
23	7.49	0	1	0	Smoking
23	11.14	0	1	0	Non-small
21	9.92	0	1.01	0	Immunotherapy
16	9.05	0	1	0	Stem
16	9.27	0	1.02	0	EGFR

NIH, National Institutes of Health.