

TABLE 8-3

## Federal laboratory technology transfer activity indicators, by selected agencies: FYs 2006, 2009, 2012, and 2016

(Number of activities)

Fiscal year and technology transfer activity	All federal laboratories	DOD	HHS	DOE	NASA	USDA	DOC	DHS
2006								
Invention disclosures and patenting								
Inventions disclosed	5,193	1,056	442	1,694	1,749	105	14	NA
Patent applications	1,912	691	166	726	142	83	5	NA
Patents issued	1,284	472	164	438	85	39	7	NA
Licensing								
All licenses, total active in the fiscal year	10,186	444	1,535	5,916	2,856	332	111	NA
Invention licenses	4,163	438	1,213	1,420	308	332	111	NA
New invention licenses in the fiscal year	711	56	253	203	47	25	83	NA
Collaborative relationships for R&D								
CRADAs, total active in the fiscal year	7,268	2,999	164	631	1	195	3,008	NA
Traditional CRADAs	3,666	2,424	92	631	1	163	149	NA
Other collaborative R&D relationships	9,738	0	0	0	4,275	3,477	2,114	NA
2009								
Invention disclosures and patenting								
Inventions disclosed	4,450	831	353	1,439	1,412	178	40	32
Patent applications	2,085	690	284	775	141	123	20	2
Patents issued	1,402	404	480	363	93	24	7	2
Licensing								
All licenses, total active in the fiscal year	12,598	432	1,584	5,742	4,181	330	40	63
Invention licenses	3,854	386	1,304	1,452	146	302	40	0
New invention licenses in the fiscal year	492	57	198	139	49	22	11	0
Collaborative relationships for R&D								
CRADAs, total active in the fiscal year	7,740	2,870	457	744	1	243	2,397	23
Traditional CRADAs	4,264	2,247	284	744	1	201	101	22
Other collaborative R&D relationships	17,647	1	0	0	4,507	10,306	2,828	5
2012								
Invention disclosures and patenting								
Inventions disclosed	5,347	1,078	352	1,661	1,656	160	60	40
Patent applications	2,576	1,013	233	933	130	122	27	10
Patents issued	2,325	1,048	335	676	131	69	13	0
Licensing								
All licenses, total active in the fiscal year	8,351	520	1,465	5,328	346	384	41	0
Invention licenses	3,893	432	1,090	1,428	296	341	41	0
New invention licenses in the fiscal year	501	44	192	192	28	28	6	0
Collaborative relationships for R&D								
CRADAs, total active in the fiscal year	8,307	2,400	377	742	0	274	2,410	94
Traditional CRADAs	4,293	1,328	245	742	0	211	154	89
Other collaborative R&D relationships	19,537	0	0	0	1,756	14,691	2,782	11
2016								
Invention disclosures and patenting								
Inventions disclosed	5,086	874	320	1,760	1,554	244	64	17
Patent applications	2,596	941	269	999	129	109	25	15
Patents issued	2,341	665	579	856	103	60	16	3
Licensing								
All licenses, total active in the fiscal year	8,950	515	1,750	5,410	452	441	57	5
Invention licenses	4,156	358	1,721	943	387	370	57	5
New invention licenses in the fiscal year	572	57	221	145	97	27	15	1
Collaborative relationships for R&D								
CRADAs, total active in the fiscal year	11,644	3,125	590	739	12	238	2,940	343

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(Number of activities)

Fiscal year and technology transfer activity	All federal laboratories	DOD	HHS	DOE	NASA	USDA	DOC	DHS
Traditional CRADAs	6,720	2,297	391	739	12	161	335	272
Other collaborative R&D relationships	18,472	452	147	0	2,204	11,854	3,273	71

NA = not available.

DOD = Department of Defense; HHS = Department of Health and Human Services; DOE = Department of Energy; NASA = National Aeronautics and Space Administration; USDA = Department of Agriculture; DOC = Department of Commerce; DHS = Department of Homeland Security; CRADA = Cooperative R&D Agreement.

**Note(s)**

The table includes seven federal departments and agencies that reported R&D obligations at or above \$1 billion in FY 2014. (The National Science Foundation was also in this group, but its corresponding data were not available.) Other federal agencies not listed but included in the All federal laboratories totals are the Department of the Interior, the Department of Transportation, the Department of Veterans Affairs, and the Environmental Protection Agency. Invention licenses refer to inventions that are patented or could be patented. CRADAs refers to all agreements executed under CRADA authority (15 U.S.C. 3710a). Traditional CRADAs are collaborative R&D partnerships between a federal laboratory and one or more nonfederal organizations. Federal agencies have varying authorities for other kinds of collaborative R&D relationships.

**Source(s)**

National Institute of Standards and Technology (NIST), U.S. Department of Commerce, *Federal Laboratory Technology Transfer, Fiscal Year 2016: Summary Report to the President and the Congress (2019)*, *Federal Laboratory Technology Transfer, Fiscal Year 2013. Summary Report to the President and the Congress (2015)*, and *Federal Laboratory Technology Transfer, Fiscal Year 2010. Summary Report to the President and the Congress (2012)*; National Institute of Standards and Technology (NIST), U.S. Department of Commerce, *Federal Lab Technology Transfer Database v.2015*. Accessed 10 January 2020.