

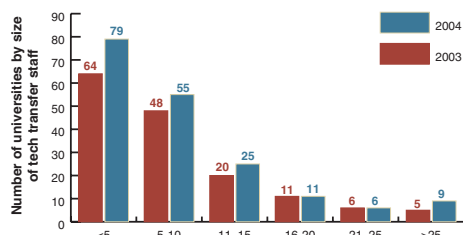
# Tech transfer revs up

Stacy Lawrence

New company formation (about half of which is biotech) from US research institutions was way up in 2004 (up to >460). In 2003, biotech startup growth in US and Europe slowed, with Denmark and Ireland showing highest relative rates of venture formation. In FY2004, US patent

## Tech transfer staffing at US universities

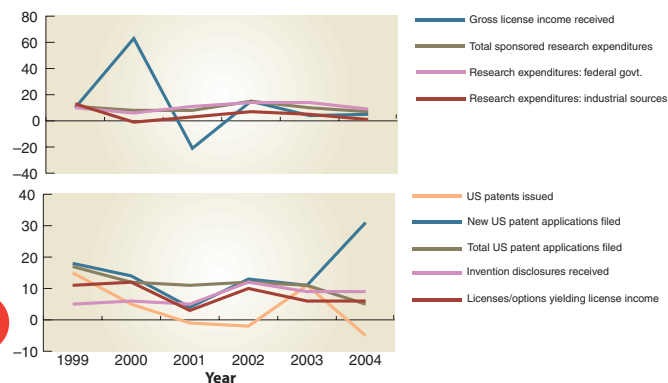
More universities are dedicating staff to tech transfer and existing staff size is increasing.



Source: Association of University Technology Managers

## Change in US university tech transfer indicators

Research expenditures were all down in 2004, but aggregate patent applications are up

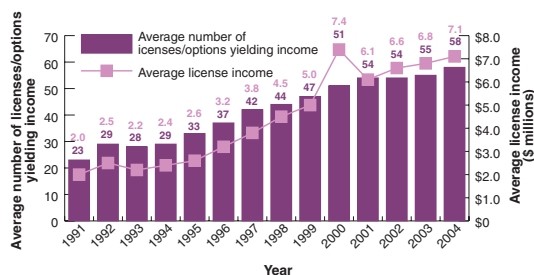


Source: Association of University Technology Managers

applications also jumped (although this may be due partly to improved reporting procedures); almost one-quarter were utility patents (most biotech patents are utility patents). Only about half of US research institutions reported equity stakes in startups (down from ~70% in 2003).

## US research institution income and licenses

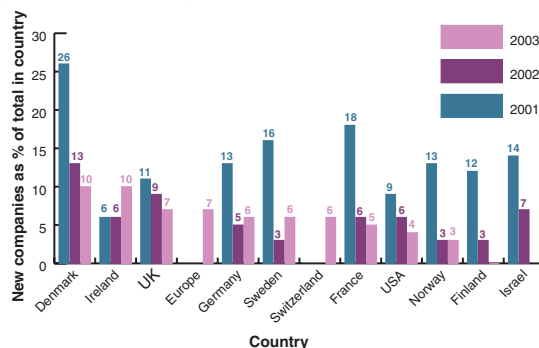
License income continues to grow at a steady rate, as does the number of lucrative licenses



Source: Association of University Technology Managers

## New biotech company formation in Europe/US

New company formation in 2003 continued to be slow, although startup activity in Ireland was buoyant



Source: Critical I

## Tech transfer at top US research institutions in 2004

Institution name	Research (\$ millions) <sup>a</sup>	License (\$ millions) <sup>b</sup>	Inventions <sup>c</sup>	Patents filed <sup>d</sup>	Executed licenses <sup>e</sup>	Paying licenses <sup>f</sup>	>\$1 million licenses <sup>g</sup>	Patents issued <sup>h</sup>	Companies formed	Companies operational
<b>Universities</b>										
Univ. of California System <sup>1</sup>	2792	79	1,196	965	273	906	15	270	5	206
Johns Hopkins Univ. <sup>1</sup>	1595	7	367	586	100	197	0	89	5	45
Massachusetts Inst. of Technology (MIT)	1027	30	515	436	134	410	4	159	20	157
Univ. of Washington/Wash. Research Fdn. <sup>1</sup>	834	25	233	133	70	322	5	38	7	N/A
Univ. of Illinois, Chicago, Urbana <sup>1</sup>	814	6	262	196	88	164	1	59	16	52
Univ. of Wisconsin at Madison <sup>1</sup>	764	48	405	217	203	261	8	93	2	30
Univ. of Michigan <sup>1</sup>	753	12	285	204	73	172	3	74	13	76
SUNY Research Fdn. <sup>1</sup>	710	13	257	172	50	157	1	43	7	43
Stanford Univ. <sup>1</sup>	694	50	350	277	89	474	6	87	9	99
Univ. of Pennsylvania <sup>1</sup>	654	9	392	287	87	54	1	45	6	43
<b>Hospitals and research institutes</b>										
The General Hospital dba Massachusetts General Hospital	463	63	245	288	75	144	5	73	3	39
Mayo Fdn. for Medical Education and Research	372	22	310	147	97	268	3	28	3	11
Brigham & Women's Hospital	363	8	104	98	40	76	1	37	5	17
M.D. Anderson Cancer Ctr.	314	5	115	46	33	41	1	19	2	11
Sloan Kettering Inst. for Cancer Res.	239	76	47	75	28	70	4	22	4	9
Fred Hutchinson Cancer Res. Ctr.	222	3	14	17	11	72	0	2	0	8
Beth Israel Deaconess Medical Ctr.	182	3	72	84	20	51	0	21	1	17
Dana-Farber Cancer Inst.	170	4	66	61	34	135	1	15	2	7
Children's Hospital, Cincinnati	150	3	32	51	17	23	1	6	3	3
St. Jude Children's Research Hospital	142	1	35	24	28	106	0	5	0	0

<sup>a</sup>Total sponsored research expenditures. <sup>b</sup>Adjusted gross license income. <sup>c</sup>Invention disclosures received. <sup>d</sup>US patent applications filed. <sup>e</sup>Licenses & options executed. <sup>f</sup>Licenses & options yielding income. <sup>g</sup>Active licenses generating >\$1 million. <sup>h</sup>US patents issued. <sup>1</sup>Medical school at the university. Source: Association of University Technology Managers