Dependent Variable:	All	nn n		Fields		EM	All	nn n		l_by_count ir Biology		EM		PDB	Med			EM	Dependent Variable:
Vostables	Extensive	PDB Intensive	Extensive	PDB Intensive	Extensive	EM Intensive	All Extensive	PDB Intensive	High	PDB Intensive	Extensive	EM Intensive	All Extensive		Extensive	PDB Intensive	Extensive	Intensive	** - **
AlphaFold	0.044**	0.012**	0.014	0.017	0.044***	0.007**	0.063**	0.021**	0.033	0.028**	0.044***	0.007**	0.011	-0.002	0.038	0.024	0.044***	0.007**	Variables AlphaFold
Counterfactual AI	(0.018) 0.033	(0.005)	(0.029)	(0.011)	(0.015) 0.038	(0.003)	(0.024) 0.054	(0.008)	(0.036)	(0.011) 0.018	(0.015) 0.038	(0.003)	(0.039)	(0.013)	(0.087)	(0.035)	(0.015) 0.038	(0.003)	Counterfactual AI
Counterfactual No AI	(0.023)	(0.013)	(0.041)	(0.025)	(0.024)	(0.011)	(0.034)	(0.022)	(0.040)	(0.029)	(0.024)	(0.011)	(0.049)	(0.026)	(0.102)	(0.049)	(0.024) 0.066***	(0.011) 0.007	Counterfactual No AI
AlphaFold - Method	(0.033)	(0.013)	(0.044)	(0.015)	(0.022)	(0.005)	(0.043)	(0.015)	(0.057)	(0.017)	(0.022)	(0.005)	(0.058)	(0.028)	(0.096)	(0.052)	(0.022)	(0.005)	
	(0.020)	-0.003 (0.021) -0.036	0.014 (0.039) 0.041	0.001 (0.037)	0.004 (0.004) 0.013	0.0010 (0.004) 0.005	0.011 (0.024)	-0.013 (0.025) 0.006	-0.017 (0.044) 0.084	-0.037 (0.038)	0.004 (0.004)	0.0010 (0.004)	(0.034)	(0.053)	0.121 (0.140)	0.112 (0.144) 0.326	0.004 (0.004)	0.0010 (0.004) 0.005	AlphaFold - Method
Counterfactual AI - Method	-0.013 (0.034)	(0.035)	(0.067)	0.014 (0.068)	(0.015)	(0.015)	0.034 (0.044)	(0.046)	(0.091)	0.038 (0.089)	0.013 (0.015)	0.005 (0.015)	0.047 (0.095)	0.054 (0.097)	0.284 (0.216)	(0.224)	0.013 (0.015)	(0.015)	Counterfactual AI - Method
Counterfactual No AI - Method	(0.032)	0.026 (0.035) 13.4***	0.076* (0.041) 14.7***	0.097* (0.054) 14.7***	0.018 (0.012) 13.9***	0.018 (0.012) 13.9***	0.041 (0.029) 14.8***	0.030 (0.042) 14.7***	0.039* (0.020)	0.058 (0.063) 13.0***	0.018 (0.012)	0.018 (0.012) 13.9***	0.031 (0.067) 22.0***	0.020 (0.073)	0.152 (0.102)	0.131 (0.099) 35.4***	0.018 (0.012) 13.9***	0.018 (0.012)	Counterfactual No AI - Method
field_agricultural_and_biological_sciences	(1.13)	(1.13)	(2.29)	(2.28)	(1.27)	(1.27)	(2.12)	(2.11)	(4.00)	(4.00)	(1.27)		(3.78)	(3.78)	35.4***	(8.93)	(1.27)	(1.27)	field_agricultural_and_biological_sciences
field_arts_and_humanities	-9.05 (5.86)	-9.05	-3.94 (8.15)	4.01	(1.27) -11.7 (7.98)	-11.7 (8.01)	15.3 (14.4)	15.4 (14.4)	-23.0 (18.1)	-23.3 (18.1)	-11.7 (7.98)	-11.7 (8.01)	-33.1 (30.4)	-33.0 (30.3)	(8.87) -1.39 (73.5)	1.63	(1.27) -11.7 (7.98)	-11.7 (8.01)	field_arts_and_humanities
${\it field\_biochemistry\_genetics\_and\_molecular\_biology}$	7.89*** (1.86)	(5.86) 7.89***	7.97*** (1.51)	(8.12) 7.95***	7.48***	7.47*** (2.13)	7.14*** (1.06)	7.13*** (1.06)		7.54*** (1.28)	7.48*** (2.13)	7.47*** (2.13)	5.42** (2.53)	5.42** (2.54)	9.59**	(71.7) 9.51** (3.66)	7.48*** (2.13)	7.47*** (2.13)	${\it field\_biochemistry\_genetics\_and\_molecular\_biology}$
field business management and accounting	14.6	(1.86) 14.6	37.2**	(1.51) 37.0**	(2.13) 28.0**	27.9**		22.2	(1.28) 44.1**	44.0**	28.0**	27.9**	29.8	30.0	(3.65) -58.6	-58.7	28.0**	27.9**	field business management and accounting
field_chemical_engineering	(10.1) 18.5**	(10.1) 18.3**	(17.7) 29.5	(17.8) 29.6 (20.5)	(10.4) 24.0***	(10.4) 23.9***	(22.1) 14.1 (10.6)	(22.1) 14.1	(17.9) 31.9	(17.9) 31.8	(10.4) 24.0***	(10.4) 23.9***	(29.3) 59.7***	(29.3) 59.6***	(121.9) 70.8	(122.1) 70.9	(10.4) 24.0***	(10.4) 23.9***	field_chemical_engineering
field_chemistry	(7.60) 8.33***	(7.57) 8.32***	(20.4) 4.35*		(8.20) 10.6***	(8.17) 10.6***	11.3***	(10.6) 11.4***	(31.1)	(31.0)	(8.20) 10.6***	(8.17) 10.6***	(16.5) 12.6***	(16.5) 12.6***	(61.2) 15.2**	(61.0) 15.1**	(8.20) 10.6***	(8.17) 10.6***	field_chemistry
field.computer-science	(2.76) 16.4***	(2.77) 16.4***	(2.32)	(2.35) 20.3***	(1.87) 17.4***	(1.87) 17.4***	(1.62) 11.7***	(1.63) 11.7***	(3.32) 15.5**	(3.33)	(1.87) 17.4***	(1.87) 17.4***	(3.57)	(3.57)	(7.22) 28.9***	(7.22) 28.5***	(1.87) 17.4***	(1.87)	field_computer_science
field decision sciences	(2.16)	(2.15)	(3.60)		(2.17)	(2.17)	(3.89)	(3.88)	(5.92)	(5.90)	(2.17)	(2.17)	(5.98)	(5.96)	(9.26)	(9.20)	(2.17)	(2.17)	field_decision_sciences
field_dentistry	(2.76) 11.6**	(2.77) 11.7**	(15.1)	-24.1 (15.1) 22.8**	(2.87) 15.7***	(2.85) 15.8***	(10.1)	(10.1)	(21.2)	(20.9) 28.4**	(2.87) 15.7***	(2.85) 15.8***	(21.8) 13.6	(21.8) 13.5	(90.7) 23.6	(90.6) 23.1	(2.87) 15.7***	(2.85)	field-dentistry
	(4.89)	(4.89)	(10.7)	(10.7)	(5.71)	(5.72)	(10.4)	(10.4)	(11.6)	(11.6)	(5.71)	(5.72)	(12.8)	(12.7)	(34.1)	(33.8)	(5.71)	(5.72)	
field earth and planetary sciences	-6.53*** (1.65)	-6.52*** (1.65)	-7.52*** (1.91)	-7.52*** (1.90)	-5.39*** (1.67)	-5.40*** (1.67)	14.8** (7.10)	14.6** (7.14)	-12.3 (17.0)	-12.5 (17.1)	-5.39*** (1.67)	-5.40*** (1.67)	46.7* (24.1)	46.9* (24.1)	35.3 (56.7)	35.1 (57.4)	-5.39*** (1.67)	-5.40*** (1.67)	${\it field\_earth\_and\_planetary\_sciences}$
field_economics_econometrics_and_finance	4.14 (9.83)	4.11 (9.85) 20.2***	11.8 (31.8) 11.2*	11.8 (31.9) 11.1*	5.08 (11.4)	5.12 (11.4)	13.6 (19.3) 16.6***	13.4 (19.3) 16.6***	-15.5 (27.1)	-16.5 (26.9) 20.3***	5.08 (11.4)	5.12 (11.4)	-13.6 (17.5) 16.5	-13.7 (17.4)	24.5 (39.3) 7.82	25.0 (40.0)	5.08 (11.4)	5.12 (11.4)	field_economics_econometrics_and_finance
field_energy	(3.66)	(3.65)	11.2° (6.40)	(6.40)	(4.09)	(4.08)	(5.20)	(5.21)	(7.12)	20.3***	(4.09)	(4.08)	16.5 (14.5)	17.1	7.82 (19.1)	7.28	(4.09)	(4.08)	field energy
field_engineering	13.3*** (1.99)	13.3*** (1.99)	9.65***	9.70***	15.3*** (2.10)	15.3*** (2.10)	12.0*** (2.33)	12.0*** (2.32)	14.4*** (4.60)	(4.63)	15.3***	15.3***	15.8*** (4.22)	15.8*** (4.24)	6.88	6.96	15.3***	15.3*** (2.10)	field_engineering
field_environmental_science	11.9***	11.9***	6.74**	6.64**	12.1***	12.1***	14.8***	14.8***	7.08	7.02	(2.10) 12.1***	(2.10) 12.1***	19 6***	19 7***	-5.77	-5.88	(2.10) 12.1***	12.1***	field_environmental_science
field_health_professions	(1.54) 0.055	(1.53) -0.003	(2.88) -10.4	(2.87)	(2.03)	(2.03) -3.31	(2.16) 12.2*	(2.16) 12.1*	(4.19) -5.67	(4.17) -5.00	(2.03) -3.26	(2.03)	(5.36) 10.9*	(5.35) 10.8*	(14.6) -21.3*	(14.6) -21.7*	(2.03)	(2.03)	field_health_professions
field_immunology_and_microbiology	(4.65) 9.68***	(4.65) 9.69***	(11.7) 8.91***	(11.7) 8.92***	(3.58) 9.83***	(3.57) 9.83***	(7.01) 9.74***	(6.99) 9.73***	(17.4) 6.67*	(17.5) 6.64*	(3.58) 9.83***	(3.57) 9.83***	(6.35) 11.1***	(6.35) 11.2***	(11.5) 18.4***	(11.9) 18.4***	(3.58) 9.83***	(3.57) 9.83***	field_immunology_and_microbiology
field materials science	(2.02) 9.61***	(2.02)	(2.13) 4.81***	(2.12) 4.83***	(2.39)	9.50***	9.74*** (1.55) 13.3***	9.73*** (1.55) 13.3***	(3.35)	(3.36)	9.51***	9.50***	(2.94)	(2.92)	(4.52)	18.4*** (4.50) 11.8	(2.39)	(2.38)	field_materials_science
field_mathematics	(1.46) 28.4***	(1.46) 28.4***	(1.35) 49.6***	(1.36) 49.3***	(1.57) 28.5***	(1.57) 28.5***	(2.16) 17.0*	(2.16) 16.9*	(3.29) 15.8	(3.28) 14.9	(1.57) 28.5***	(1.57) 28.5***	(4.71) 49.3***	(4.71) 49.5***	(11.6) 36.8	(11.5)	(1.57) 28.5***	(1.57) 28.5***	field_mathematics
field medicine	(7.38) 8.59***	(7.37)	(15.7) 8.88***	(15.8) 8.90***	(9.78)	(9.76)	(8.97)	(8.95) 7.38***	(13.4)	(13.0)	(9.78)	(9.76)	(14.6)	(14.6) 9.23***	(27.8)	(27.4)	(9.78)	(9.76)	field medicine
	(2.35)	(2.35)	(2.38)	(2.37) 17.0***	(2.22)	(2.22)	(1.55)	(1.55)	(2.57)	(2.56)	(2.22)	(2.22)	(1.33)	(1.33)	(2.41)	(2.43)	(2.22)	(2.22)	
field_neuroscience	(1.09) 13.1***	(1.09) 13.0***	17.0*** (2.42)	(2.42) 9.09	(1.19) 13.3***	(1.20) 13.3***	10.9*** (1.45) 8.50**	10.9*** (1.45) 8.52**	18.9*** (3.60) 2.27	(3.60) 2.17	13.2*** (1.19) 13.3***	(1.20) 13.3***	20.5*** (3.58) 7.88	20.5*** (3.58) 7.85	14.9 (11.4) 15.3	14.7 (11.4) 15.4	13.2*** (1.19) 13.3***	13.2*** (1.20) 13.3***	field_neuroscience
field_norsing	(2.32)	(2.32)	9.11 (7.74)	9.09	(2.56)	(2.56)	8.50** (4.17)	8.52** (4.18)	2.27 (9.73)	2.17 (9.76)	(2.56)	(2.56)	7.88 (5.46)	7.85 (5.45)	15.3 (19.2)	15.4 (19.4)	(2.56)	(2.56)	field_nursing
field_pharmacology_toxicology_and_pharmaceutics	6.80** (2.70)	6.81** (2.70)	6.47 (5.85)	(7.77) 6.44 (5.94)	8.47***	8.43***	7.09 (4.30)	7.18 (4.31)	4.71 (6.96)	4.68 (6.92)	8.47*** (2.58)	8.43*** (2.57)	3.67 (7.51)	3.64 (7.53)	12.2 (15.0)	12.4 (15.0)	8.47*** (2.58)	8.43*** (2.57)	field_pharmacology_toxicology_and_pharmaceutics
field physics and astronomy	8.07***	8.04***		(5.84) 12.7***	(2.58) 10.1***	(2.57)		9.27***	8.25	8.13 (6.85)			15.1	15.2		34.3		10.1***	field_physics_and_astronomy
field_psychology	(2.08) 11.4**	(2.08) 11.5**	(4.34) 4.46	(4.39) 4.70	(1.67) 13.3***	(1.67) 13.3***	(3.22) 12.4*	(3.22) 12.5*	(6.91) 13.1	13.2	(1.67) 13.3***	(1.67) 13.3***	(11.7) 12.6**	(11.7) 12.5**	(23.3) 13.3	(23.1) 13.3	(1.67) 13.3***	13.3***	field_psychology
field social sciences	(5.27) 3.90	(5.27) 3.92	(12.9) 13.7	(12.9) 13.8	(4.46) 8.90*	(4.46) 8.97*	(6.84) 1.68	(6.83) 1.75	(25.2) 8.22	(25.2) 8.58	(4.46) 8.90*	(4.46) 8.97*	(5.62) 11.6	(5.64) 11.4	(28.7) 71.9	(28.7) 71.6	(4.46) 8.90°	(4.46) 8.97*	field_social_sciences
field_veterinary	(4.25) -6.14	(4.25) -6.14	(11.4) -23.7**	(11.5) -23.3**	(5.06) -12.4**	(5.06)	(5.77) -22.6**	(5.77)	(6.95) -44.4**	(7.15) -44.1**	(5.06) -12.4**	(5.06) -12.5**	(10.3) -10.9	(10.3) -11.0	(43.3)	(44.0) -14.7	(5.06) -12.4**	(5.06) -12.5**	field_veterinary
mesh	(4.65) 28.2 (21.0)	(4.65)	(10.0) 103.7***	(10.1) 104.3***	(5.08) 23.7	(5.10) 23.9	(10.4) 56.7***	(10.4) 57.0***	(21.4) 66.5*	(21.5) 67.9**	(5.08) 23.7	(5.10) 23.9	(11.1) 111.4***	(11.1) 111.9***	(31.3) 252.7***	(31.6) 253.4***	(5.08) 23.7	(5.10) 23.9	mesh.
mesh-A	(21.0) 9.84***	(21.0) 9.84***	(32.6)	(32.8)	(18.2) 9.35***	(18.3) 9.35***	(15.3)	(15.3)	(33.0)	(32.8)	(18.2) 9.35***	(18.3) 9.35***	(29.6) 9.70***	(29.8) 9.69***	(74.1) 9.83**	(73.8) 9.82**	(18.2) 9.35***	(18.3) 9.35***	mesh.A
··· •	(0.743)	(0.742)	(2.47)	(2.47)	(0.974)	(0.972)	(1.21)	(1.21)	(3.32)	(3.30)	(0.974)	(0.972)	(1.92)	(1.91)	(4.70) 20.5***	(4.69)	(0.974)	(0.972)	mesh B
mesh_B	10.1*** (0.980) 10.3***	10.1*** (0.978) 10.3***	(2.08) 19.3***	(2.08)	(1.10)	(1.10)	12.0*** (1.25)	(1.25) 11.9***	(2.53) 18.1***	(2.56) 18 2***	(1.10)	(1.10)	20.9*** (2.54) 12.7***	(2.55) 12.6***	(5.52) 23.2***	20.4*** (5.53) 23.1***	(1.10)	(1.10)	
mesh,C	(1.15)	(1.16)	(2.74)	19.3*** (2.74)	9.79*** (1.20)	9.77*** (1.20)	11.9*** (1.30)	(1.30)	(3.26)	(3.28)	9.79*** (1.20)	9.77*** (1.20)	(2.16)	(2.15)	(5.12)	(5.11)	9.79*** (1.20)	9.77*** (1.20)	mesh_C
mesh_D	3.44*** (0.453)	(0.453)	(0.672)	5.94*** (0.673)	(0.444)	(0.445)	3.08*** (0.575)	3.08*** (0.577)	5.62*** (0.918)	(0.922)	(0.444)	3.89*** (0.445)	(0.874)	(0.875)	8.33*** (2.28)	8.31*** (2.28)	(0.444)	(0.445)	mesh <sub>*</sub> D
mesh_E	(1.00)	(1.01)	5.30** (2.51)	5.34**	3.29***	3.29***	(1.45)	4.51***	6.38° (3.38)	(3.36)	3.29***	3.29***	4.29	4.31 (2.83)	4.98 (6.84)	5.13	3.29***	3.29*** (1.15)	mesh_E
$mesh_*F$	9.06*** (1.63)	9.05*** (1.63)	8.02 (5.99)	(2.51) 7.87 (5.97)	(1.15) 11.3*** (2.10)	(1.15) 11.3*** (2.10)	(3.28)	(1.45) 8.00** (3.28)	10.4 (10.2)	10.0 (10.2)	(1.15) 11.3*** (2.10)	(1.15) 11.3*** (2.10)	(2.83) 18.3*** (4.21)	18.4*** (4.20)	38.4*** (13.8)	(6.84) 38.2*** (13.7)	(1.15) 11.3*** (2.10)	(2.10)	mesh.F
mesh <sub>a</sub> G	8.90***	8.90***	8.18***		8.52***	8.53***	9.76***	9.76***	9.59***	9.56***	(0.928)	8.53*** (0.929)	12.6*** (1.84)	12.6*** (1.84)	4.47	4.39	(0.928)	8.53***	mesh <sub>2</sub> G
mesh.H	17 2***	17.2***	45.6***	(2.01) 45.5***	18.1***	18.1***	16.4***	16.4***	44.9***	44.8***	18.1***	18.1***	25.7*	25.7*	43.0	42.4	18.1***	18.1***	mesh <sub>s</sub> H
mesh.,I	(3.11) 6.81 (4.87)	(3.11) 6.79	(10.1) 25.3	(10.1) 24.5	(3.02) 4.89	4.88	(4.13) 13.1 (14.4)	(4.13) 12.8	(12.2) 69.9*	(12.2) 68.4*	(3.02) 4.89	(3.02) 4.88	(15.0) -10.2	(15.0) -10.2	(45.9) -32.7 (53.4)	(45.8) -33.2	(3.02) 4.89	(3.02) 4.88	mesh_I
mesh <sub>e</sub> J	7.67	(4.87) 7.68***	(25.9) 31.8***	24.5 (26.1) 31.7***	(4.48) 6.33***	(4.47) 6.33***		(14.5) 13.4***	(35.5) 31.2***	(35.7)	(4.48) 6.33***	(4.47) 6.33***	(15.3) 16.2**	(15.2) 16.2***	8.03	(53.4) 7.46	(4.48) 6.33***	6.33***	mesh.J
mesh.K	(1.77) -26.7	(1.77) -26.4	(4.66) -4.25	(4.68) -3.74	(2.22) -43.8*	(2.22) -43.2*	(2.19) -19.0	(2.18)	(6.67) 51.6	(6.70) 51.6	(2.22) -43.8*	(2.22) -43.2*	(5.97) -136.8***	(5.93) -136.4***	(27.5) -292.4**	(27.4) -290.8**	(2.22) -43.8*	(2.22) -43.2*	mesh.K
mesh-L	(19.2)	(19.3)	(49.9) 21.9***	(49.5)	(22.4)	(22.7)	(26.0)	(26.1)	(51.9)	(51.6)	(22.4)	(22.7)	(33.9)	(33.9)	(125.8) 23.9	(122.7)	(22.4)	(22.7) 14.7***	mesh.L
	(1.52) 15.8***	(1.53) 15.8***	(5.69)	(5.67) 14.5*	(2.05) 13.1***	(2.06) 13.0***	(2.95) 15.2***	(2.95) 15.3***	(7.38)	(7.35)	(2.06)	(2.06) 13.0***	(8.87) 15.8***	(8.86)	(16.6)	(16.6)	(2.05)	(2.06)	
$\operatorname{mesh}_{\bullet}M$	(2.60)	(2.60)	14.3 (8.46)	(8.47)	(3.09)	(3.09)	(4.10)	(4.09)	-3.11 (15.7)	-3.32 (15.8)	(3.09)	(3.09)	(3.92)	(3.91)	(11.9)	(11.9)	(3.09)	(3.09)	mesh.M
mesh.N	13.2*** (1.89)	(1.89)	28.9*** (7.18)	28.9*** (7.16)	14.3*** (1.89)	14.4*** (1.89)	(3.42)	(3.43)	31.1*** (10.1)	31.2*** (10.0)	14.3*** (1.89)	14.4*** (1.89)	27.4*** (4.29)	(4.29)	15.2 (14.4)	14.9 (14.4)	14.3*** (1.89)	14.4*** (1.89)	mesh_N
mesh_Z	-3.05 (4.06)	-3.07 (4.07)	16.0 (17.1)	15.4 (17.0) -0.006	-3.11 (3.89) 7.66**	-3.08 (3.90) 7.59**	4.39	4.31 (10.3) 19.4***	37.9 (33.6)	36.4 (33.4)	-3.11 (3.89) 7.66**	-3.08 (3.90) 7.59**	-4.49 (9.29)	-4.47 (9.31)	11.7 (33.4)	11.6 (33.5)	-3.11 (3.89)	-3.08 (3.90) 7.59**	mesh <sub>*</sub> Z
mesh,n	6.32*	(3.73)	(17.1) 0.407 (9.52)	-0.006 (9.59)	7.66**	7.59**	(10.3) 19.5*** (5.24)	19.4*** (5.24)	18.8 (14.3)	18.6	7.66**	7.59** (3.45)	(9.29) 5.69 (6.81)	5.72 (6.79)	-14.2 (23.6)	-14.4 (23.9)	7.66**	7.59**	mesh_n
$AlphaFold \times Counterfactual \ AI$	(3.73) -0.020	0.0004	-0.102	0.006	0.064	-0.001	-0.028	-0.001	-0.086	0.002	0.064	-0.001	-0.206**	-0.037***	-0.648	-0.115	(3.44) 0.064	-0.001	${\bf AlphaFold} \times {\bf Counterfactual} \; {\bf AI}$
$AlphaFold \times Counterfactual No AI$	(0.085) -0.075	(0.009) -0.0001	(0.175) -0.361*	(0.009) -0.005	(0.050) 0.012	(0.002) -0.0005*	(0.103) -0.094	(0.008) 0.00005	(0.216) -0.435*	(0.008) -0.003	(0.050) 0.012	(0.002) -0.0005*	(0.101) -0.127	(0.004) 0.014*	(0.458) 0.040	(0.163) -0.0002	(0.050) 0.012	(0.002) -0.0005*	$AlphaFold \times Counterfactual No AI$
$AlphaFold-Method \times Counterfactual\ AI-Method$	(0.127) -0.171	(0.0006) -0.191	(0.179) 0.082*	(0.004) -0.0004	(0.054) -0.061*	(0.0002)	(0.143)	(0.0006)	(0.220)	(0.002)	(0.054) -0.061*	(0.0002)	(0.265)	(0.008)	(0.536)	(0.014)	(0.054) -0.061*	(0.0002)	$AlphaFold$ - $Method \times Counterfactual AI$ - $Method$
AlphaFold - Method × Counterfactual No AI - Method	(0.218)	(0.207)	(0.045)	(0.076)	(0.034)	(0.035)	(0.132) -0.018	(0.128)	(0.073)	(0.126) -0.219	(0.034)	(0.036)	0.0001	-0.124**			(0.034)	(0.036)	AlphaFold - Method × Counterfactual No AI - Method
	(0.018)	(0.020)	(0.298)	(0.354)	(0.0006)	(0.0005)	(0.023)	(0.025)	(0.344)	(0.417)	(0.0006)	(0.0006)	(0.031)	(0.050)			(0.0005)	(0.0005)	·
Fixed-effects pl.id	Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Fixed-effects pt_id
quarter_year	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	quarter_year institution_type
institution_cited_by_count institution_2yr_mean_citedness	Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	institution_cited_by_count institution_2yr_mean_citedness
institution.h.index institution.it0.index	Yes Yes	Yes Yes	Yes	Yes Yes Yes	Yes	Yes	Yes Yes Yes	Yes	Yes	Yes Yes Yes	Yes	Yes	Yes	Voc	Yes Yes Yes	Yes	Yes	Yes	institution_2yr_mean_citedness institution_h_index institution_110_index
institution_country_code	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes	Yes Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes Ves	Yes Yes Yes	Yes Yes Yes	Yes Yes Ves	institution at0 index institution country code covid share, 2020
covid_share_2020 Fit statistics		Yes		Yes						Yes	-		Yes	Yes	Yes				Fit statistics
Observations R <sup>2</sup>	87,284 0.63	87,284 0.63	20,649 0.64	20,649 0.64	78,819 0.60	78,819 0.60	42,436 0.65	42,436 0.65	11,484 0.66	11,484	78,819 0.60	78,819 0.60	22,584 0.71	22,584 0.71	4,401 0.73	4,401 0.73	78,819 0.60	78,819 0.60	Observations R <sup>2</sup>
Mean(Dep. Var.)	3.766	3.766	3.865	3.865	3.698	3.698	3.764	3.764	3.860	3.860	3.698	3.698	3.850	3.850	4.044	4.044	3.698	3.698	Mean(Dep. Var.)
Clustered (pi_id & quarter_year) standard-errors in parer	otheses																		Clustered (pi_id & quarter_year) standard-errors in parent

Alpha Bald - Method × Connete factural No. J. Frend. effects pl. Algunster, paragraphy of the pl. A 87,284 87,284 20,649 0.57 0.57 0.59 1.281 1.281 1.397

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iariables	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensi
phaFold	(0.024	(0.002	(0.016	(0.004	(0.023	(0.0007	(0.039	(0.002	(0.022	(0.003	(0.023	(0.0007	(0.039)	-0.001 (0.013)	(0.084	(0.036	(0.023	0.000
ounterfactual AI	(0.029)	0.028* (0.015)	-0.071 (0.054)	-0.003 (0.035)	0.035 (0.024)	(0.011)	(0.034)	(0.026)	-0.049 (0.043)	(0.032)	(0.024)	(0.011)	-0.028 (0.046)	-0.030 (0.025)	-0.131° (0.074)	-0.152*** (0.025)	(0.035	0.027
ounterfactual No AI	0.044	0.004	0.058	-0.002	0.059**	0.007	0.049	0.0008	0.061	-0.0009	0.069**	0.007	0.047	0.024	-0.014	0.020	0.069**	0.00
lphaFold - Method	(0.035)	(0.014) -0.022	(0.064)	(0.023) -0.010	(0.026)	(0.005) 0.0006	(0.042) -0.011	(0.014) -0.016	(0.050)	(0.015) -0.047	(0.026) -0.0004	(0.005) 0.0006	(0.070) -0.010	(0.031)	(0.101) 0.107	(0.050) 0.092	(0.026)	0.00
	(0.022)	(0.028)	(0.044)	(0.036)	(0.004)	(0.004)	(0.034)	(0.027)	(0.037)	(0.032)	(0.004)	(0.004)	(0.060)	(0.059)	(0.146)	(0.148)	(0.004)	(0.00
ounterfactual AI - Method	-0.028 (0.030)	-0.045 (0.031)	(0.077)	0.046 (0.072)	0.008	0.0008	0.006	-0.005 (0.044)	(0.081)	(0.049	(0.008	0.0008	(0.086)	(0.086)	(0.146) 0.369* (0.213)	0.426* (0.219)	0.008 (0.015)	0.00
ounterfactual No AI - Method		0.008	0.053	0.073	0.010	0.013	0.017	0.017	0.006	0.018	0.010	0.013	-0.006	-0.013		0.167**	0.010	0.01
eld agricultural and biological sciences	(0.036) 11.7***	(0.036) 11.7***	(0.050)	(0.062) 13.0***	(0.014) 12.3***	(0.012) 12.3***	(0.035) 13.0***	(0.041) 13.0***	(0.026)	(0.048) 10.4***	(0.014) 12.3***	(0.012) 12.3***	(0.080) 18.0***	(0.084) 18.1***	(0.077)	(0.073)	(0.014) 12.3***	(0.01 12.3
eld_arts_and_humanities	(1.11)	(1.11)	(2.21)	(2.22) -4.42	(1.23)	(1.23)	(2.09)	(2.09)	(3.67)	(3.68)	(1.23)	(1.23)	(3.63)	(3.64)	(7.97)	(8.04)		(1.2
	(4.46)	(4.47)	-4.43 (8.51)	(8.46)	-9.86 (6.77)	-9.88 (6.80)	5.81 (13.2)	5.93 (13.2)	-30.2 (20.5)	-30.0 (20.6)	(6.77)	-9.88 (6.80)	-28.4 (24.8)	-28.2 (24.7)	-58.2 (61.5)	-53.4 (61.1)	-9.86 (6.77) 6.61***	(6.8)
ld_biochemistry_genetics_and_molecular_biology	7.12*** (1.64)	7.12*** (1.65)		6.93*** (1.36)	(1.96)	(1.96)			6.30*** (1.12)	6.28*** (1.12)	6.61***	(1.96)	4.71**	4.71**		7.33** (3.34)	(1.86)	6.60
ld_business_management_and_accounting	7.75	7.83	(1.36) 29.7	29.3	(1.86) 24.7**	(1.86) 24.7**	(0.902) 16.9	(0.901) 17.0	29.8	29.7	(1.86) 24.7**	(1.86) 24.7**	(2.30) 9.91	(2.31) 10.1	(3.34)	-22.3	(1.86) 24.7**	(1.8) 24.7
ld_chemical_engineering	(9.24)	(9.23) 19.7***	(18.5) 31.4	(18.5) 31.4	(9.71) 22.8***	(9.71) 22.6***	(16.3) 12.2	(16.3) 12.1	(20.9) 38.8	(20.9) 38.6	(9.71)	(9.71)	(33.1)	(33.2)	(96.6) 18.6	(96.9) 19.1	(9.71)	(9.7
	(7.02)	(6.99)	(19.2)	(19.2)	(7.62)	(7.60)	(10.0)	(10.0)	(25.9)	(25.9)	(7.62)	(7.60)	(14.5)	(14.5)	(69.5)	(69.8)	(7.62)	(7.6)
ld_chemistry	8.13*** (2.76) 14.9***	8.13*** (2.76) 14.9***	4.38* (2.49)	4.34* (2.52) 18.9***	(1.82)	10.5*** (1.82) 15.5***	(1.56)	(1.56)	9.92*** (3.05) 13.5**		10.5*** (1.82) 15.4***	(1.82)	9.85***	9.85***	18.1** (7.18) 28.1***	18.0** (7.17) 27.6***	(1.82)	10.5° (1.8° 15.5°
ld_computer_science	(2.35)	(2.34)	(2.49) 18.8*** (3.49)	(3.50)	(1.82) 15.4*** (2.23)	(2.24)	(1.56) 10.6*** (3.79)	(1.56) 10.6*** (3.78)	(6.14)	(3.06) 13.6** (6.16)	15.4*** (2.23)	(1.82) 15.5*** (2.24)	(3.20) 25.8*** (5.61)	(3.20) 25.8*** (5.59)	28.1***	(10.1)	(1.82) 15.4*** (2.23)	15.5*
ld_decision_sciences	-4.73	-4.75	-18.1	-17.7	-0.720	-0.727	-8.28	-8.35	-8.37	-7.88	-0.720	-0.727	19.4	19.7	-63.7	-61.6	-0.720	-0.7
ld_dentistry	(2.94) 7.92	(2.95) 7.97	(13.7) 18.5	(13.7) 18.8	(2.38)	(2.36) 9.28°	(10.6)	(10.6)	(23.0) 27.9**	(22.8) 28.3**	(2.38) 9.14*	(2.36) 9.28*	(20.2) 8.79	(20.2)	(65.4) 11.0	(65.2) 10.7	(2.38) 9.14*	9.28
	7.92 (4.80) -6.16***	(4.82)	(11.1)	(11.3)	9.14" (5.34) -5.44***	9.28" (5.35) -5.47***	(7.68) 11.8	(7.70) 11.8	27.9** (11.9) -17.8	28.3** (12.1) -18.0	9.14* (5.34) -5.44***	9.28* (5.35) -5.47***	8.79 (11.0) 43.2*	(11.0)	11.0 (30.0) 30.7	(29.6)	9.14° (5.34) -5.44***	9.28 (5.35 -5.47
ld_earth_and_planetary_sciences	-6.16*** (1.71)	-6.16*** (1.71)	-6.98***	-6.99*** (2.41)	-5.44*** (1.52)	-5.47*** (1.53)	11.8 (7.36)	(7.38)	-17.8 (17.2)	-18.0 (17.2)	-5.44*** (1.52)	-5.47*** (1.53)	43.2° (23.1)	43.3* (23.0)		(56.2)	-5.44*** (1.52)	-5.47° (1.53
dd_economics_econometrics_and_finance	6.15	6.19	(2.41) 7.12	7.95	3.96	4.02	17.9	17.0	0.674	o one	3.96	4.02	-9.58	-9.60	-2.31 (35.1)	-1.24 (36.5)	200	4.03
ld_energy	(9.45) 18.1***	(9.45) 18.1***	(32.8) 10.2	(32.9)	(9.86) 19.8***	(9.86) 19.8***	(19.2) 13.8***	(19.2) 13.7***	(32.7) 16.2**	(33.0) 16.1**	(9.86) 19.8***	(9.86) 19.8***	(17.0) 9.49	(16.9) 9.92		3.92	(9.86) 19.8***	(9.86 19.8°
	(3.78) 11.5***	(3.78)	(6.66) 6.61**	(6.66) 6.65**	(4.00) 13.4***	(3.98) 13.5***	(4.51) 9.75***	(4.51) 9.75***	(7.30) 12.8***	(7.32) 12.8***	(4.00) 13.4***	(3.98) 13.5***	(15.5) 9.85**	(15.5) 9.85**	(21.2) -0.849	(21.3) -0.792	(4.00) 13.4***	(3.98 13.5*
ld_engineering	(1.71)	(1.71)	(2.91)	(2.93)	(1.76)	(1.76)	(2.02)	(2.02)	(4.23)	(4.26)	(1.76)	(1.76)	(4.25)	(4.26)			(1.76)	(1.70
dd_environmental_science	9.95***	9.94***	4 99**	4 94**	10.4***	10.4***	11.8***	11.8***	6.24	6.20	10.4***	10.4***	21 3***	PR 4000	-2.12 (15.2)	-2.17 (15.3)	10.4***	10.4
d_health_professions	(1.45) 1.23	(1.45) 1.19	(2.32)	(2.32)	(1.96) -2.26	(1.95)	(1.87) 13.0*	(1.87) 12.9*	(3.88) 0.845	(3.88) 1.71	(1.96) -2.26	(1.95)	(5.35) 7.80	(5.34) 7.78	-8.10	-8.61	(1.96) -2.26	(1.90
	(4.07)	(4.07) 8.26***	(10.8) 8.02***	(10.9)	(3.31)	(3.32)	(6.92)	(6.92) 6.61***	(12.8)	(12.9)	(3.31)	(3.32)	(6.17) 9.67***	(6.17)	(16.5) 16.4***	(16.5) 16.5***	(3.31)	(3.3:
ld_immunology_and_microbiology	8.26*** (1.88)	(1.88)	(2.16)	8.01*** (2.14)	8.08*** (2.20)	(2.19)	6.63*** (1.52)	(1.52)	(3.09)	4.57 (3.08)	(2.20)	(2.19)	(2.59)	9.71*** (2.57)	(4.34)	(4.33)	8.08*** (2.20)	(2.1)
ld_materials_science	8.30***	8 29***	4 mores	4.39***	8.43*** (1.44)	8.43*** (1.44)	11 2***	11 2***	1.59	1.49 (3.01)	8.43***	8.43*** (1.44)	e cess	8.61** (4.05)	6.47	6.62 (12.3)	o exec-	8.43
ld_mathematics	(1.38)	(1.38) 29.5***	(1.36) 55.4***	(1.37) 55.1***	30.1***	30.2***	(2.11) 15.4°	(2.12) 15.4°	11.0	10.4	(1.44) 30.1***	30.2***	(4.06) 42.9***	43.0***	53.0°	52.6*	(1.44) 30.1***	30.2
ld_medicine	(7.93) 7.94***	(7.93) 7.94***	(18.8) 8.79***	(18.9) 8.80***	(10.4) 8.39***	(10.4) 8.40***	(8.98) 6.41***	(8.97) 6.40***	(13.5) 6.68***	(13.2) 6.62***	(10.4)	(10.4) 8.40***	(15.3) 8.30***	(15.4) 8.30***	(29.4)	(29.2)	(10.4) 8.39***	(10. 8.40°
	(2.10)	(2.10)	(2.35)	(2.35)	(1.98)	(1.98)	(1.30)	(1.30)	(2.32)	(2.32)	(1.98)	(1.98)	(1.25)	(1.25)	(2.93)	(2.95)	(1.98)	(1.9)
ld_neuroscience	12.0*** (1.03)	12.0*** (1.03)	16.1*** (2.49)	16.1*** (2.48)	11.8*** (1.18)	(1.18)	(1.39)	(1.40)	(3.49)	(3.49)	(1.18)	11.8*** (1.18)	16.9*** (3.21)	(3.21)	8.29 (11.0)	8.03 (11.0)	11.8***	(1.1)
ld_nursing	9.93***	9.90***	6.49	6.45	9.81***	9.77***	6.30*	6.31"	0.462	0.418	(1.18) 9.81***	9.77***	2.65	2.63	1.77	1.92	(1.18) 9.81***	9.77
ld_pharmacology_toxicology_and_pharmaceutics	(1.93) 5.37**	(1.92) 5.39**	(6.32) 5.05	(6.34) 5.01	(2.11) 8.11***	(2.10) 8.12***	(3.60)	(3.61)	(8.91) 4.50	(8.93) 4.34	(2.11) 8.11***	(2.10) 8.12***	(5.45) -0.417	(5.44)	(21.5) 4.54	(21.8) 4.68	(2.11) 8.11***	(2.10 8.12
ld_physics_and_astronomy	(2.47)	(2.47)	(5.20)	(5.20)	(2.47)	(2.45)	(3.91)	5.50 (3.92) 6.64**	(7.12) 9.58	(7.11)	(2.47)	(2.45)	(7.26)	(7.28)	4.54 (13.2)	4.68 (13.3)	(2.47)	(2.4)
	(1.81)	(1.81)	(3.76)	(3.81)	(1.76) 12.2***	(1.76)	(3.13)	(3.13)	9.58 (6.39)	9.54 (6.34)	(1.76) 12.2***	(1.76) 12.2***	(10.2)	11.9 (10.2) 7.41	29.3 (22.4)	29.1 (22.1)	(1.76) 12.2***	(1.7)
ld_psychology	10.2* (5.06)	10.2* (5.06)	2.86 (11.9)	3.01 (11.9)	(3.89)	12.2***	12.5* (7.14)	12.6*	-2.34 (26.9)	-2.02	(3.89)	(3.89)	7.43 (5.36)	7.41 (5.34)	17.7 (24.8)	18.1	12.2***	12.2
ld_social_sciences	-0.100	-0.094	4.02	4.10	5.04	(3.89) 5.12	-3.38	(7.14)	7.29	(26.9) 7.67	5.04	5.12	9.04	8.88	57.8 (46.8)	(24.8) 56.8	(3.89) 5.04 (4.52)	5.1
ld.veterinary	(3.98)	(3.98)	(9.46) -11.6*	(9.52) -11.3*	(4.52) -12.2**	(4.52)	(5.13) -9.52	(5.15)	(10.0) -19.5	(10.2) -19.8	(4.52) -12.2**	(4.52)	(10.2)	(10.2)	(46.8) -28.0	(47.4)	(4.52) -12.2**	(4.53 -12.2
	(4.38)	(4.39)	(5.94) 112.7***	(5.96) 113.1***	(4.69)	(4.72)	(10.2)	(10.1)	(16.7) 84.5***	(16.8) 84.8***	(4.69)	(4.72)	(10.0)	(10.0) 94.5***	(28.0)	(28.3)	(4.69)	(4.7)
rsh.	29.2 (19.8)	29.3 (19.8)	(32.1)	(32.3)	26.3 (17.6)	26.4 (17.7)	(14.7)	(14.7)	(27.3)	(27.5)	26.3 (17.6)	26.4 (17.7)	(33.8)		(80.6)	235.2*** (80.1)	26.3 (17.6)	26.4
rsh_A	7.55***	7.55***	(32.1) 12.6*** (2.46)	(32.3) 12.6***	7.23*** (0.914)	7.24***	(14.7) 9.31***	(14.7) 9.31*** (1.05)	(27.3) 14.4***	(27.5) 14.4***	7.23***	7 24***	6.08*** (1.97)	6.07*** (1.96)	5.22	5.19 (4.50)	7.23***	7.24
rsh.B	(0.748) 8.48***	(0.747) 8.49***		(2.46)		(0.913) 8.95***	(1.04) 10.2***		(3.25) 9.58***	9.68***	(0.914) 8.94***	(0.913) 8.95***			(4.50) 19.1***		(0.914) 8.94***	(0.91 8.95*
rsh_C	(1.02) 8.84***	(1.01) 8.84***	(1.98) 15.9***	(1.99) 15.9***	(1.12) 8.34***	(1.12) 8.33***	(1.18) 9.81***	(1.18) 9.81***	(2.39) 14.2***	(2.40) 14.3***	(1.12) 8.34***	(1.12) 8.33***	(2.56) 11.4***	(2.57) 11.3***	(5.99) 20.7***	(5.98) 20.6***	(1.12) 8.34***	(1.12 8.33*
	(1.07)	(1.08)	(2.95)	(2.94)	(1.12)	(1.12) 3.36***	(1.19)	(119)	(3.40)	(3.41)	(1.12) 3.35***	(1.12)	(2.00)	(2.00)	(5.04)	(5.01)	(1.12)	(1.1:
sh_D	3.02*** (0.435)	(0.435)	5.22*** (0.676)	5.22*** (0.681)	(1.12) 3.35*** (0.407)	3.36*** (0.407)	2.80*** (0.519)	2.80*** (0.520)	5.28*** (0.885)	(3.41) 5.28*** (0.888)	(0.407)	(1.12) 3.36*** (0.407)	4.56*** (0.909)	(0.909)	6.96*** (2.01)	6.95*** (2.01)	(0.407)	3.36
sh.E	4.93***	4.92***		6.62***			5.73***	5.73***			3.84***			3.87	2.58	2.77	3.84***	
sh.F	(0.883) 6.50***	(0.884)	(2.34) 3.55	(2.34) 3.54	(0.981) 8.91***	(0.984) 8.88***	(1.35)	(1.35) 4.94*	(2.83) 9.20	(2.82) 8.93	(0.981) 8.91***	(0.984) 8.88***	(2.71) 14.5***	(2.71) 14.6***	(7.20)	(7.21) 37.7**	(0.981) 8.91***	(0.98 8.88*
	(1.69)	(1.69)		(5.80)	(1.89)	(1.88)	(2.66)	(2.66)	(11.7)	(11.7)	(1.89)		(4.72)	(4.71)	(16.4)	(16.3)	(1.89)	(1.88
rsh <sub>2</sub> G	7.98*** (0.730)	7.98*** (0.731)	7.05*** (1.88)	7.05*** (1.87)	7.41*** (0.812)	7.41*** (0.814)	8.45*** (0.973)	8.45*** (0.972)	8.25*** (2.09)	8.20*** (2.10)	7.41*** (0.812)	7.41*** (0.814)	(1.61)	(1.61)	5.49 (4.75)	5.39 (4.72)	7.41*** (0.812)	7.41
rsh <sub>+</sub> H		16 2***			16.1***		17 2***	17.2***			16 1***		18.1			97.4		16.0
I, des	(2.66) 3.33	(2.65) 3.31	(9.44) 15.5 (27.6)	(9.47) 15.3	(2.61) 3.92	(2.61) 3.89	(3.92) 10.4	(3.93) 10.3	(12.4) 74.0*	(12.4) 73.4°	(2.61) 3.92	(2.61) 3.89	(14.4) -16.6	(14.4) -16.6	(42.7) -51.0	(42.7) -51.3 (39.8)	(2.61) 3.92	(2.6
	(4.57)	(4.57)	(27.6)	(27.7)	(4.00)	(3.99)	(12.7)	(12.8)	(38.9)	(39.4)	(4.00)	(3.99)	(13.3)	(13.3)	(39.6)	(39.8)	(4.00)	(3.95
rsh.J	6.33*** (1.50)	6.34*** (1.50)	(4.76)	(4.77)	5.16*** (1.75)	5.17*** (1.75)	(2.21)	(2.20)	(6.90)	(6.92)	5.16*** (1.75)	5.17*** (1.75)	(5.36)	(5.33)	20.7 (26.6)	20.0 (26.5)	5.16*** (1.75)	5.17
ssh_K	-10.8	-10.6	0.137	0.694	29.2	-27.7	-5.52	-5.10	47.2	47.4	26.2	97.7		95 1**	-277.7*	-274.5*		27
rsh <sub>a</sub> L	(17.3) 13.5***	(17.4) 13.5***	(37.0) 21.5***	(36.6) 21.4***	(19.0) 12.4***	(19.3) 12.4***	(24.3) 17.7***	(24.4) 17.6***	(46.3) 23.2***	(45.9) 23.1***	(19.0) 12.4***	(19.3) 12.4*** (1.87)	(37.9) 10.4	(37.7) 10.3	(146.2) 26.8 (18.8)	(144.7) 26.5	(19.0) 12.4***	(19.1 12.4
	(1.41)	(1.42)	(5.15)	(5.12)	(1.87)	(1.87)	(2.64)	(2.65)	(7.03)	(7.01)	(1.87)	(1.87)	(8.23)	(8.22)	(18.8)	26.5 (18.9)	(1.87)	(1.8)
sh <sub>*</sub> M	(2.42)	(2.42)	19.6** (8.39)	19.8** (8.40)	11.1*** (2.86)	(2.86)	(3.75)	(3.74)	-0.755 (14.8)	-0.898 (14.9)	(2.86)	(2.86)	(3.58)	(3.58)	40.1*** (12.2)	(12.2)	(2.86)	(2.8)
rsh_N	11 5***	11 5***	29 0***	28 1***		(2.86) 11.9***	12 6***	12 6***	21 4***	21 7***	(1.80)	11.9***	20.0***	25 9***	26.1*	25.71	11 0***	11.9
esh.Z	(1.90) -1.53 (3.93)	(1.89) -1.53	(7.57) 9.35 (16.6)	(7.55) 8.81	(1.80) 0.107	(1.80) 0.128	(2.90) 2.47	(2.90) 2.46	(8.94) 11.9	(8.94) 10.2	0.107	0.128	(3.86) 1.52 (8.55)	(3.86) 1.55 (8.56)	(14.4) 3.22	(14.4) 3.28	(1.80) 0.107	0.12
shan	(3.93) 5.62	(3.95) 5.59	(16.6) -0.878	(16.5) -1.16	(3.78)	(3.80)	(9.97) 18.4***	(9.96) 18.4***	(38.9) 14.0	(38.8)	(3.78)	(3.80)	(8.55) 9.06	(8.56) 9.10	(29.6) 1.56	(29.8) 1.44	(3.78)	(3.8)
	5.62 (3.72) 0.017	5.59 (3.72) 0.002	-0.878 (9.84) -0.026	-1.16 (9.92) 0.008	7.55** (3.55) 0.051	7.47** (3.55) -0.003	(5.07) 0.052	(5.08) 0.002	14.0 (13.5) 0.046	13.7 (13.6) 0.004	7.55** (3.55) 0.051	7.47** (3.55) -0.003	9.06 (6.36) -0.140	9.10 (6.35) -0.022	1.56 (21.5) -0.874*	1.44 (21.7) -0.201	7.55** (3.55) 0.051	7.47 (3.5 -0.0
phaFold × Counterfactual AI	(0.017	(0.002	-0.026	(0.008		-0.003 (0.002)	(0.052	(0.002	(0.267)	(0.004	(0.051	-0.003 (0.002)	-0.140 (0.089)	-0.022 (0.027)		-0.201 (0.182)	(0.051	-0.00
phaFold × Counterfactual No AI	0.017	0.0007	(0.237) -0.288	-0.003	(0.050) 0.004 (0.056)	-0.0006**	0.003	0.0009	-0.298	-0.0007	0.004	-0.0006**	-0.055	0.014*	(0.471) -0.041 (0.555)	-0.0009	0.004	-0.000
phaFold - Method × Counterfactual AI - Method	(0.128) -0.156	(0.001)	(0.200) 0.007	(0.007)	(0.056) -0.045	(0.0002)	(0.135) -0.052	(0.001)	(0.183) 0.027	(0.003)	(0.056)	(0.0002)	(0.289)	(0.008)	(0.555)	(0.009)	(0.056)	(0.000
	-0.156 (0.214) -0.002	(0.197)	(0.267) -0.152	-0.042 (0.334) -0.220	(0.035) -0.0009	(0.037) -0.001*	-0.062 (0.175) -0.021	-0.054 (0.162) -0.024	(0.053) -0.156	(0.116)	-0.045 (0.035) -0.0009	-0.034 (0.037) -0.001*					(0.035) -0.0009	-0.00
pha Fold - Method × Counterfactual No AI - Method	-0.002 (0.023)	-0.005 (0.022)	-0.152 (0.285)	-0.220 (0.321)	-0.0009 (0.0006)	-0.001* (0.0006)	-0.021 (0.028)	-0.024 (0.023)	-0.156 (0.273)	-0.216 (0.323)	-0.0009 (0.0006)	-0.001* (0.0006)	(0.006	-0.110 (0.068)			-0.0009 (0.0006)	-0.00
zel-effects	(0.023)	(0.022)	(0.400)	(0.021)	(0.0000)	(0.0000)	(0.028)	(0.020)	(0.270)	(0.020)	(0.0000)	(0.000)	(0.000)	(0.008)			(0.000)	(0.00
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye
arter_year stitution_type stitution_cited_by_count	Yes	Yes	Yes Yes	Yes Yes Yes	Yes Yes	Yes	Yes	Yes	Yes Yes	Yes Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes Yes	Yes Yes	Ye Ye
titution_cited_by_count	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes	Yes	Ye Ye
titution_2yr_mean_citedness titution_h_index	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Ye Ye
stitution i10 index	Yes Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Ye Ye
stitution_country_code vid_share_2020	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Ye Ye
it statistics	. 100	. 100			. 100	- 28	.40				-10		. 400	. 100	. 440	. 100	.40	.45
bervations	87,284 0.56	87,284 0.56 2.335	20,649 0.57 2.438	20,649	78,819	78,819	42,436 0.58 2.316	42,436	11,484	11,484	78,819	78,819 0.53 2.276	22,584	22,584	4,401 0.70 2.694	4,401 0.70 2.694	78,819 0.53 2.276	78,8 0.5 2.27
				0.57	0.53	0.53		0.58 2.316	0.59 2.405	0.59 2.405	0.53 2.276		0.66	0.66 2.459				

| Temporary | Temp Counterfactual AI
Counterfactual No AI
AlphaFold - Method Counterfactual No AI - Method field arts and humanities field\_business\_management\_and\_accounting field chemical engineering field chemistry field computer science field decision sciences field\_dentistry field\_dentistry field\_earth\_and\_planetary\_sciences field\_enonomics\_econometrics\_and\_fin field\_energy field\_engineering field\_environmental\_science field\_immunology\_and\_n field\_materials\_science field\_mathematics field\_medicine field\_neuroscience field\_neuroscience field, abstract ology carlockogo field dajbris cand astronomy field, asysthology mode, a mode, d. AlphaFold × Counterfactual AI
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Dependent Variable:									ln1p_pat	ent_count ir Biology									Dependent Variable:
				Fields											Med				
West-blue	Extensive	PDB		PDB	Extensive	EM	Extensive	PDB	Extensive	PDB Intensive	Extensive	EM	All Extensive	PDB	_	PDB	Extensive	EM	Variables
AlphaFold	-0.021*	-0.007	-0.023	-0.002	-0.019***	-0.003	-0.021	-0.011*	-0.046	-0.013	-0.019***	-0.003	-0.048	-0.015	-0.027	Intensive 0.008	-0.019***	-0.003	AlphaFold
Counterfactual AI	(0.012)	(0.005) -0.011	(0.026) -0.004	(0.014) 0.008	(0.006) -0.017	(0.002)	(0.015)	(0.006)	(0.029)	(0.011)	(0.006) -0.017	(0.002)	(0.036)	(0.017) -0.006	(0.102)	(0.051) 0.006	(0.006)	(0.002)	Counterfactual AI
	(0.018)	(0.009)	(0.039)	(0.020)	(0.014)	(0.004)	(0.020)	(0.014)	(0.041)	(0.018)	(0.014)	(0.004)	(0.060)	(0.029)	(0.127)	(0.082)	(0.014)	(0.004)	
Counterfactual No AI	-0.016 (0.017)	-0.015** (0.007)	-0.030 (0.039)	-0.017 (0.011)	-0.002 (0.011)	-0.004 (0.003)	0.010 (0.019)	-0.004 (0.005)	(0.025	(0.002)	-0.002 (0.011)	-0.004 (0.003)	-0.082 (0.053)	-0.053** (0.026)	-0.190 (0.123)	-0.087* (0.049)	-0.002 (0.011)	-0.004 (0.003)	Counterfactual No AI
AlphaFold - Method	-0.028**	-0.019	-0.033* (0.019)	-0.028	-0.003 (0.003)	(0.00005	-0.018	-0.005 (0.015)	-0.041**	-0.036* (0.018)	-0.003	(0.00005	-0.088 (0.057)	-0.077 (0.054)	(0.005	-0.001	-0.003 (0.003)	0.00005	AlphaFold - Method
Counterfactual AI - Method	(0.012) -0.005	(0.013) 0.008	0.006	(0.020) 0.010	-0.002	0.002	(0.012) -0.005	0.011	(0.017) 0.002	0.001	(0.003) -0.002	0.002	-0.039	-0.020	0.094	(0.108) 0.097	-0.002	0.002	Counterfactual AI - Method
Counterfactual No AI - Method	(0.021) -0.045	(0.020) -0.021	(0.050) -0.018	(0.052) 0.017	(0.005) -0.004	(0.006) 0.001	(0.029) -0.026	(0.030) -0.005	(0.079) -0.036*	(0.081) -0.029	(0.006) -0.004	(0.006) 0.001	(0.054) -0.160	(0.052) -0.134	(0.151) -0.003	(0.156) -0.016	(0.006) -0.004	(0.006) 0.001	Counterfactual No AI - Method
field agricultural and biological sciences	(0.034)	(0.037)	(0.029) 2.38*	(0.044) 2.36*	(0.008) 0.564*	(0.007)	(0.018) 0.888	(0.024) 0.896	(0.019) 1.09	(0.035) 1.07	(0.008) 0.564*	(0.007) 0.566*	(0.118) 6.96***	(0.105) 6.94***	(0.088) 24.7**	(0.088) 24.6**	(0.008) 0.564*	(0.007)	field agricultural and biological sciences
	(0.273)	(0.272)	(1.30) 1.41	(1.29) 1.35	(0.291)	(0.291)	(0.670) 3.16	(0.672)	(2.29)	(2.30) -5.36	(0.291)	(0.291)	(2.55) -8.36	(2.54) -8.41	(9.19) 6.28	(9.21) 4.80	(0.291)	(0.291)	
field_arts_and_humanities	(1.74)	(1.74)	(6.91)	(6.93)	(1.77)	-1.05 (1.77)	(6.56)	3.22 (6.55)	(9.16)	(9.12)	(1.77)	-1.05 (1.77)	(5.73)	(5.68)	(50.6)	(50.8)	-1.05 (1.77)	-1.05 (1.77)	field_arts_and_humanities
field_biochemistry_genetics_and_molecular_biology	(0.345)	(0.345)	(0.551)	(0.550)	0.660* (0.343)	(0.344)	(0.200)	(0.198)	(0.444)	(0.441)	0.660° (0.343)	(0.344)	-0.227 (0.724)	-0.249 (0.723)	-1.31 (2.02)	-1.37 (1.95)	0.660° (0.343)	(0.344)	field_biochemistry_genetics_and_molecular_biology
field business management and accounting	5.64*	5.63*	6.29		5.58	5.60	7.69	7.67	3.75	4.07	5.58	5.60	0.910	0.776	6.89	5.67	5.58	5.60	field business management and accounting
field_chemical_engineering	(3.18)	(3.17) -1.18	(7.93) -0.625	(7.97) -0.641	0.394	0.339	(7.14) -2.81	(7.12) -2.90	(8.01) -1.47	(8.01) -1.62	0.394	0.339	(12.2) 4.03	(12.1) 3.90	-0.522	(65.0) -1.43	(3.99) 0.394	0.339	field_chemical_engineering
field chemistry	(1.58) 0.853*	(1.59) 0.854°	(5.28) 1.10	(5.27)	(2.01) 1.25**	(2.01) 1.25**	(2.86)	(2.84)	(12.9)	(12.9)	(2.01) 1.25**	(2.01) 1.25**	(7.96) 2.35	(7.99) 2.35	(27.4) 10.5*	(27.4) 10.2*	(2.01)	(2.01) 1.25**	field.chemistry
field computer science	(0.463)	(0.462) 1.35	(0.698)	(0.694)	(0.496)	(0.495)	(0.782)	(0.787)	(1.57)	(1.57)	(0.496) 2.46**	(0.495)	(2.19) 1.72	(2.18) 1.93	(5.53)	(5.46)	(0.496)	(0.495)	field_computer_science
	(1.05) -2.42*	(1.05)	(2.28) -13.3*	(2.29) -12.9*	(0.946)	(0.948) -0.566	(1.51) -4.66	(1.52) -4.55	(3.69)	(3.70) -9.71	(0.946) -0.575	(0.948)	(2.65) -21.9	(2.64) -22.5*	(9.35) -75.7***	-0.446 (9.17) -74.2**	(0.946)	(0.948) -0.566	
field_decision_sciences	-2.42* (1.28)	-2.41* (1.28)	-13.3* (6.92)	-12.9* (6.90)	-0.575 (1.30)	-0.566 (1.31)	-4.66 (5.14)	-4.55 (5.14)	-10.1 (7.87)	-9.71 (7.90)	-0.575 (1.30)	-0.566 (1.31)	-21.9 (13.4)	-22.5* (13.2)	-75.7*** (27.5)	-74.2** (27.6)	-0.575 (1.30)	-0.566 (1.31)	field_decision_sciences
field_dentistry	-0.922 (1.26)	-0.928 (1.27)	-13.6*** (4.99)	-13.5** (4.96)	-2.57** (0.985)	-2.55** (0.987)	1.33 (2.98)	1.30 (2.99)	-10.9* (5.72)	-10.7* (5.69)	-2.57** (0.985)	-2.55** (0.987)	-1.13 (4.07)	-1.24 (4.06)	-24.9 (21.5)	-25.8 (21.4)	-2.57** (0.985)	-2.55** (0.987)	field_dentistry
field earth and planetary sciences	0.225	0.206	0.476	0.446	0.149	0.141	-0.738	-0.702	0.294	0.328	0.149	0.141	0.632	0.773	-1.03	-1.12	0.149	0.141	field_earth_and_planetary_sciences
field_economics_econometrics_and_finance	(0.629) -7.23**	(0.632) -7.23**	(0.842) -26.8***	(0.849)	(0.859) -5.73*	(0.863) -5.70*	(2.83) -4.73	(2.83) -4.64	(5.80) -35.3	(5.77) -36.0	(0.859) -5.73*	(0.863) -5.70*	(4.35) -3.74	(4.22)	(12.2) -23.4	(11.6) -24.6	(0.859) -5.73*	(0.863) -5.70*	field economics econometries and finance
field_energy	(3.04)	(3.04)	(8.22)	(8.22)	(2.92)	(2.90)	(6.62)	(6.60)	(22.1)	(22.0)	(2.92)	(2.90)	(8.71)	(8.73)	(31.8) 25.8	(31.7)	(2.92)	(2.90)	field_energy
	(1.23)	(1.23)	(2.63)	(2.63)	(1.21)	(1.21)	(1.57)	(1.57)	(2.53)	(2.58)	(1.21)	(1.21)	(16.5)	(16.4)	(38.4)	(38.5)	(1.21)	(1.21)	
field_engineering	(0.635)	(0.634)	(2.03)	(2.03)	(0.795)	(0.794)	(0.767)	(0.765)	-0.785 (2.10)	-0.789 (2.10)	(0.795)	(0.794)	1.84	1.85	3.64	4.00	(0.795)	(0.794)	field_engineering
field_environmental_science	(0.635) 0.342 (0.500)	(0.634) 0.355 (0.500)	-1.21 (1.63)	(2.03) -1.23 (1.63)	(0.795) 0.296 (0.445)	(0.794) 0.301 (0.447)	(0.767) 1.29 (1.16)	(0.765) 1.29 (1.15)	3.36	3.29	(0.795) 0.296 (0.445)	(0.794) 0.301 (0.447)	(2.47) 1.68 (3.22)	(2.46) 1.74 (3.23)	(12.3) -12.1 (9.60)	(12.2) -12.8 (9.57)	(0.795) 0.296 (0.445)	(0.794) 0.301 (0.447)	field_environmental_science
field_health_professions	1.69	1.74	-4.14	-3.90	1.77	1.77	5.19	5.25	-0.028	0.122	1.77	1.77	-2.42 (2.79)	-2.39	-17.0	-16.6	1.77	1.77	field_health_professions
field_immunology_and_microbiology	(1.24)	(1.24)	(5.44) 4.30**	(5.38) 4.31**	(1.28) 1.53*	(1.29) 1.52*	(3.19) 1.53*	(3.18) 1.52*	(8.88) 2.07	(8.85)	(1.28) 1.53*	(1.29) 1.52*	(2.79)	(2.80)	(10.5) 11.3**	(10.3) 11.2**	(1.28) 1.53*	(1.29) 1.52*	field_immunology_and_microbiology
field_materials_science	(0.728) -0.086	(0.729)	(1.67) -0.721	(1.66)	(0.787) 0.160	(0.786) 0.160	(0.902) 0.123	(0.901) 0.108	(2.65) -0.384	(2.64)	(0.787) 0.160	(0.786) 0.160	(1.30)	(1.31)	(4.37)	(4.36) -7.02	(0.787) 0.160	(0.786)	field_materials_science
	(0.307)	(0.308)	(0.630)	(0.692)	(0.327)	(0.327)	(0.692)		(1.27)	-0.380 (1.25)	(0.327)	(0.327)	(1.98)	-3.26 (1.97)	-7.27 (7.46)	(7.44)	(0.327)	0.160 (0.327)	
$field_{\bullet}mathematics$	8.20** (3.74)	8.22** (3.74)	22.5** (9.07)	22.7** (9.05)	8.85** (3.93)	8.89** (3.93)	-0.438 (4.24)	-0.417 (4.28)	3.84 (8.00)	3.99 (8.04)	8.85** (3.93)	8.89** (3.93)	27.4** (11.1)	27.4** (11.0)	34.6 (21.3)	35.1 (21.1)	8.85** (3.93)	8.89** (3.93)	field_mathematics
field_medicine	1.76**	1.77**	3.35**	3.34**	1.51**	1.52**	0.984**	0.988**	2.51**	2.51**	1.51**	1.52**	2.17***	2.18***	3.63**	3.64**	1.51**	(0.590)	field_medicine
field_neuroscience	(0.657) 0.493	(0.657) 0.499	0.484	(1.39) 0.486	(0.589) 0.014	(0.590) 0.009	(0.436)	(0.435)	(1.08) 2.15	(1.08) 2.17	0.014	(0.590)	(0.568) -0.663	(0.566) -0.706	(1.47) -7.50	(1.46) -7.59	(0.589) 0.014	0.009	field_neuroscience
field_nursing	(0.430)	(0.432)	(1.24)	(1.24)	(0.498)	(0.499)	(0.737)	(0.740)	(1.80)	(1.81)	(0.498)	(0.499)	(1.21)	(1.21)	(5.28)	(5.23)	(0.498)	(0.499)	field_nursing
field pharmacology toxicology and pharmaceutics	(0.629)	(0.629)	(2.88)	(2.88)	(0.715)	(0.715)	(1.20)	(1.20)	(3.35) 1.66	(3.35)	(0.715)	(0.715)	(2.31)	(2.32)	(13.0) -7.79	(13.0) -7.64	(0.715) -0.218	(0.715)	field_pharmacology_toxicology_and_pharmaceutics
	(0.955)	(0.956)	(2.62)	(2.62)	(0.913)	(0.910) 0.394	(2.13)	(2.13)	(3.90)	(3.91)	(0.913)	(0.910)	(3.33)	(3.35)	(13.2)	(13.2)	(0.913)	(0.910) 0.394	
field_physics_and_astronomy	(0.547)	(0.547)	(1.70)	(1.69)	(0.409	(0.594	(1.56)	0.596 (1.56)	-3.49 (2.52)	-3.49 (2.50)	(0.562)	(0.394	-8.22 (5.24)	-8.29 (5.21)	-11.7 (16.7)	-11.6 (16.7)	(0.409	(0.566)	field_physics_and_astronomy
field_psychology	2.05	2.03	-1.19	-1.13 (6.23)	1.90 (1.29)	1.93	(3.72)	0.201	0.606	0.969 (14.3)	1.90 (1.29)	1.93	6.81	6.82	7.38	7.12 (17.9)	1.90 (1.29)	1.93	field_psychology
field_social_sciences	(1.80) -1.73	(1.80) -1.74	(6.19) -2.24	-2.37	-0.673	(1.29) -0.657	-3.92	(3.73)	(14.3) -1.75	-1.91	-0.673	(1.29) -0.657	(4.42) -1.64	(4.43)	(17.8) -1.00	-1.52	-0.673	(1.29) -0.657	field social sciences
field_veterinary	(1.43) -4.24**	(1.43) -4.24**	(6.62) -11.8**	(6.65) -11.7**	(1.59)	(1.60)	(2.36)	(2.36)	(8.30) -4.26	(8.36) -4.46	(1.59)	(1.60)	(4.95)	(5.01)	(24.8) -30.9**	(25.6)	(1.59)	(1.60)	field_veterinary
mesh.	(1.77) 19.1**	(1.77) 19.0**	(4.80) 73.8**	(4.77)	(1.67)	(1.67)	(4.99)	(4.97)	(11.2)	(11.1)	(1.67)	(1.67)	(4.30) 42.5*	(4.36) 41.6*	(12.5) 186 0**	(11.7)	(1.67)	(1.67)	mesh.
	(8.02)	(8.00)	(34.0)	(34.0)	(5.34)	(5.35)	(10.4)	(10.4)	(36.0)	(36.1)	(5.34)	(5.35)	(24.2)	(24.2)	(73.3)	(73.7)	(5.34)	(5.35)	
mesh_A	(0.887***	(0.317)	1.41 (1.18)	1.41 (1.18)	(0.319)	(0.319)	0.952*	0.956* (0.490)	2.93° (1.65)	2.98° (1.65)	(0.319)	0.870** (0.319)	-0.589	-0.577 (0.959)	-2.32 (3.64)	-2.39	(0.319)	0.870** (0.319)	mesh_A
mesh_B	(0.317) 2.11*** (0.310)	2.11***	4.02***	4.02***	2.41*** (0.368)	(0.369)	(0.491) 2.15*** (0.463)	2.16***	1.62	1.63	(0.368)	(0.369)	(0.955) 7.00*** (1.06)	7.03***	7.64**	(3.66) 7.65**	(0.368)	(0.369)	mesh_B
mesh,C	0.988***	(0.310) 0.991*** (0.339)	4.73***	4.75***	1.08***	1.08***	2.01***	2.02***	(1.38) 6.57***	6.58***	1.08***	1.08***	-0.453 (0.732)	-0.447	-1.20	(3.44) -1.06 (3.25)	1.08***	1.08***	mesh <sub>*</sub> C
mesh.D	(0.340)		(1.70)	(1.69)	(0.341)	(0.340)	(0.507)	(0.505)	(2.28)	(2.28)	(0.341)	(0.340)		(0.733) 1.66***	(3.23)		(0.341)	(0.340)	mesh.D
	(0.143)	(0.143)	(0.358)	(0.357)	(0.163)	(0.164)	(0.200)	(0.199)	(0.386)	(0.384)	(0.163)	(0.164)	(0.397)	(0.396)	(1.39)	(1.41)	(0.163)	(0.164)	mesh.E
mesh.E	(0.504)	(0.503)	8.24*** (1.73)	8.24*** (1.73)	(0.446)	(0.445)	(0.785)	(0.786)	(2.19)	8.62*** (2.20)	(0.446)	(0.445)	(1.40)	5.74*** (1.39)	(5.80)	16.4*** (5.77)	(0.446)	(0.445)	
mesh_F	0.390 (0.767)	(0.769)	1.49 (2.97)	1.46 (2.99)	0.490 (0.681)	(0.680)	-0.775 (1.20)	-0.762 (1.20)	-0.342 (4.05)	-0.290 (4.06)	0.490 (0.681)	(0.497	1.53 (1.92)	1.49 (1.93)	7.77 (6.62)	7.02 (6.53)	0.490 (0.681)	0.497 (0.680)	mesh_F
$mesh_aG$	0.323	(0.267)	-0.630 (0.955)	-0.611 (0.957)	0.382	0.383	0.546	0.550	0.596	0.595	0.382	0.383	0.796 (0.811)	0.811	-1.84	-1.82	(0.280)	0.383	mesh_G
mesh_H	-0.034	-0.023	5.24	5.19	0.526	0.536	0.109	0.134	2.88	3.07	0.526	0.536	-1.77	-1.80	-17.5	(3.21)	0.526	0.536	mesh.H
mesh.I	(0.990) 2.92	(0.986)	(5.00)	(4.98)	(0.954) 4.31	(0.951) 4.28	(2.23) 7.44	(2.22) 7.49	(6.36)	(6.34)	(0.954) 4.31	(0.951) 4.28	(4.06)	(4.09)	(31.2)	(31.2) -73.1**	(0.954) 4.31	(0.951) 4.28	mesh_I
mesh_I	(2.85)	(2.85) 0.196	(9.82) 4.47°	-25.9** (9.76) 4.46*	(2.95) 0.125	(2.93)	(8.36) 2.02*	(8.35) 2.02*	6.21 (18.7) 5.19	6.03 (18.7) 5.17	(2.95) 0.125	(2.93) 0.129	-2.38 (5.62) -3.77	(5.67)	(29.1)	(29.3) -12.6	(2.95) 0.125	(2.93) 0.129	mesh.J
	(0.521)	(0.522)	(2.47)	(2.48)	(0.428)	(0.429)	(1.15)	(1.15)	(3.33)	(3.34)	(0.428)	(0.429)	(2.52)	(2.53)	(15.6)	(15.6)	(0.428)	(0.429)	
mesh_K	-8.09 (4.89)	-7.96 (4.86)	-10.2 (14.5)	-10.2 (14.5)	-9.17* (4.92)	-9.14° (4.91)	-11.0** (5.34)	-10.7* (5.34)	-11.7 (18.9)	-11.5 (18.8)	-9.17* (4.92)	-9.14* (4.91)	-0.546 (15.9)	-0.602 (15.9)	(50.9)	52.9 (50.3)	-9.17° (4.92)	-9.14* (4.91)	mesh.K
mesh_L	2.89*** (0.619)	(0.619)	0.960	(2.08)	1.93**	1.93** (0.740)	3.97*** (1.04)	3.95*** (1.05)	0.679	0.620	1.93** (0.736)	1.93** (0.740)	3.47	3.50	2.64 (11.8)	2.86 (11.7)	1.93** (0.736)	1.93**	mesh_L
mesh <sub>s</sub> M	0.581	0.580	0.548	0.618	-0.274	-0.280	-0.805	-0.815	-0.387	-0.377	-0.274	-0.280	0.090	0.072	0.364	0.935	-0.274	-0.280	mesh,M
mesh.N	(0.777) 0.506	(0.775) 0.502	(4.20)	(4.21) 3.61	(0.816) 0.521	(0.812) 0.524	(1.79)	(1.80)	(5.94) -0.354	(5.97)	(0.816) 0.521	(0.812) 0.524	(1.93) 0.612	(1.94) 0.563	(14.4) 6.38	(14.5) 6.56	(0.816) 0.521	(0.812) 0.524	mesh_N
mesh.Z	(0.552)	(0.551)	(3.91)	(3.91)	(0.564)	(0.564)	(0.064)	(0.965)	(4.01)	(3.97)	(0.564) -2.79**	(0.564)	(2.15)	(2.15) 2.04	(12.1)	(12.2)	(0.564)	(0.564) -2.79**	mesh.Z
	-1.48 (1.12)	(1.12)	(9.38)	-8.93 (9.38)	(1.30)	(1.30)	-5.72 (3.45)	-5.75 (3.45)	(16.2)	-8.41 (16.1)	(1.30)	(1.30)	2.05 (5.05)	(4.99)	-21.7 (25.1)	-22.7 (25.3)	(1.30)	(1.30)	
mesh,n	(1.40)	2.10	23.1***	23.0***	1.74 (1.58)	1.75			16.0° (9.33)		1.74	1.75		(3.36)	43.1** (19.5)	42.2**	1.74	1.75	mesh,n
$AlphaFold \times Counterfactual AI$	(1.40) -0.055	(1.41) -0.004	(7.54) -0.106	(7.54) -0.006	-0.002	0.00007	(2.06) -0.036	(2.07) -0.002	(9.33) -0.084	(9.36) -0.003	(1.58) -0.002	0.00007	(3.35) -0.095	-0.009	-0.305	(19.7) -0.115	(1.58) -0.002	0.00007	$AlphaFold \times Counterfactual AI$
AlphaFold × Counterfactual No AI	(0.063) -0.056	(0.006) 0.0007*	(0.134) -0.087	(0.007) 0.001	(0.019)	(0.0009) -0.0002	(0.088)	(0.007) 0.0003	(0.186) -0.043	(0.007) -0.0003	(0.019) -0.062**	(0.0009) -0.0002	(0.133) -0.039	(0.031) -0.004	(0.272) -0.126 (0.519)	(0.103) 0.004	(0.019) -0.062**	(0.0009) -0.0002	$AlphaFold \times Counterfactual No AI$
AlphaFold - Method × Counterfactual AI - Method	(0.048)	(0.0004)	(0.096)	(0.002)	(0.025)	(0.0002)	(0.038)	(0.0004) 0.005	(0.077)	(0.001)	(0.025)	(0.0002)	(0.247)	(0.014)	(0.519)	(0.020)	(0.025)	(0.0002)	AlphaFold - Method × Counterfactual AI - Method
	(0.044)	(0.063)	(0.052)	(0.062) 0.107	(0.011) 0.0005	(0.012)	(0.106)	(0.103) 0.007	(0.067)	(0.064)	(0.011) 0.0005	(0.012)					(0.011) 0.0005	(0.012)	
Alpha Fold - Method $\times$ Counterfactual No AI - Method	0.013 (0.011)	0.010 (0.010)	(0.052)	(0.068)	(0.0005	0.0001 (0.0003)	0.013 (0.011)	(0.007	0.118° (0.070)	0.116 (0.087)	(0.0005)	0.0001 (0.0003)	(0.050	0.103 (0.103)			(0.0005	0.0001 (0.0003)	Alpha Fold - Method $\times$ Counterfactual No AI - Method
Fixed-effects																			Fixed-effects
pi_id quarter_year	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	pi_id quarter_year
institution_type institution_cited_by_count institution_cited_by_count	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	institution_type institution_cited_by_count
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	institution_2yr_mean_citedness
institution_h_index institution_i10_index	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	institution.h.index institution.i10.index
institution_country_code covid_share_2020	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	institution_country_code covid_share_2020
Fit statistics																			Fit statistics
Observations D2	87,284	87,284	20,649	20,649	78,819 0.23	78,819	42,436	42,436	11,484	11,484	78,819 0.23	78,819 0.23	22,584	22,584	4,401 0.48	4,401	78,819 0.23	78,819 0.23	Observations D2
R* Mean(Dep. Var.)	0.28	0.28 0.177	0.34	0.34	0.23	0.23	0.28	0.28 0.168	0.32	0.32 0.237	0.23	0.23	0.231	0.231	0.48	0.48	0.23	0.23	K* Mean(Dep. Var.)
Clustered (pi_id & quarter_year) standard-errors in paren	theses																		Clustered (pi_id & quarter_year) standard-errors in pare

Clustered (pi id & quarter year) standard-errors in parentheses

 statistics
 87.284
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 0.21
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 m(Dep. Var.)
 0.100
 0.100
 0.100

 stered (pi\_i d b\* quarter\_wear) standard-errors in parentheses

| The color of the

Dependent Variable:									ln1p_ca Molecular	_count		Molt:						
	All I	PDB	All F High		CI	EM	All	PDB	Molecular High		CI	EM	All	PDB	Medicine High PDB		CI	EM
Variables	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive
AlphaFold	(0.007	(0.0005)	(0.005	0.0008	(0.008	-0.0009 (0.0010)	(0.001	-0.0009 (0.001)	(0.007	(0.00003	(0.008	-0.0009 (0.0010)	(0.018	(0.005)	(0.065)	(0.015)	(0.008)	-0.0009 (0.0010)
Counterfactual AI	(0.006) -0.021" (0.011)	-0.012* (0.006)	(0.013) -0.051* (0.025)	-0.033** (0.014)	-0.015 (0.010)	(0.0010) -0.011** (0.005)	(0.004) 0.0006 (0.006)	(0.001) 0.00001 (0.003)	(0.009) 0.002 (0.010)	(0.003)	(0.006) -0.015 (0.010)	(0.0010) -0.011** (0.005)	(0.023) -0.068 (0.044)	-0.044 (0.027)	-0.127 (0.113)	-0.128 (0.088)	(0.006) -0.015 (0.010)	(0.0010) -0.011** (0.005)
Counterfactual No AI	0.036** (0.014)	(0.007)	0.059* (0.034)	0.014 (0.011)	(0.015)	0.016** (0.006)	0.004 (0.009)	(0.002)	-0.002 (0.015)	0.004 (0.004)	(0.015)	(0.006)	0.102* (0.053)	(0.023)	0.138 (0.120)	0.075 (0.058)	(0.015)	(0.006)
AlphaFold - Method	(0.005	(0.002)	(0.034)	0.008	-0.003 (0.002)	-0.003 (0.002)	0.0003	-0.0008 (0.003)	-0.003 (0.009)	-0.003 (0.005)	-0.003 (0.002)	-0.003 (0.002)	(0.033)	0.009	(0.071	0.060	-0.003 (0.002)	-0.003 (0.002)
Counterfactual AI - Method	-0.007	-0.013	0.008	0.004	-0.0005	0.001	-0.009	-0.010	-0.002	-0.005	-0.0005	0.001	0.006	0.003	0.064	0.105	-0.0005	0.001
Counterfactual No AI - Method	(0.009)	(0.010) -0.021	(0.018)	(0.017)	(0.004) 0.029*	(0.005)	(0.009)	(0.008)	(0.022)	(0.015) -0.019	(0.004)	(0.005) 0.019*	(0.043) -0.028	(0.042)	(0.132) 0.017	(0.140)	(0.004) 0.029*	(0.005)
field_agricultural_and_biological_sciences	(0.010) 0.241	(0.014) 0.238	(0.013) 2.83**	(0.025) 2.85**	(0.015) 0.182	(0.011) 0.182	(0.007)	(0.009)	(0.013) -0.540*	(0.020)	(0.015) 0.182	(0.011) 0.182	(0.038) 3.99*	(0.039)	(0.089) 16.9*	(0.083) 17.0*	(0.015) 0.182	(0.011) 0.182
field_arts_and_humanities	(0.194)	(0.193)	(1.06)	(1.06)	(0.172)	(0.172)	(0.274)	(0.271)	(0.289)	(0.250)	(0.172)	(0.172)	(2.24)	(2.26)	(8.80)	(8.84) 24.6	(0.172)	(0.172)
field biochemistry genetics and molecular biology	(1.46)	(1.47)	(3.19)	(3.18)	(1.68)	(1.67)	(2.36)	(2.35)	(4.01)	(3.82)	(1.68)	(1.67)	(11.4)	(11.4)	(18.1)	(18.5)	(1.68)	(1.67)
	(0.150)	(0.152)	(0.214)	(0.217)	(0.147)	(0.150)	(0.120)	(0.112)	(0.138)	(0.123)	(0.147)	(0.150)	(0.798)	(0.802)	(1.21)	(1.24)	(0.147)	(0.150)
field_business_management_and_accounting	-2.29 (1.40)	-2.29 (1.40)	-1.62 (3.32)	-1.80 (3.33)	-1.77 (1.58)	-1.66 (1.57)	-0.309 (1.30) 1.13	-0.279 (1.30)	1.49 (3.17)	(3.15)	-1.77 (1.58)	-1.66 (1.57)	-19.0** (7.99)	-18.5** (7.92)	-71.0* (41.3)	-68.7 (41.3)	-1.77 (1.58)	-1.66 (1.57)
field_chemical_engineering	0.370 (0.744)	0.315 (0.746)	-0.171 (1.56)	-0.139 (1.51)	-0.244 (0.783)	-0.310 (0.793)	(1.59)	1.15 (1.57)	1.49 (3.98)	(3.89)	-0.244 (0.783)	-0.310 (0.793)	1.22 (8.71)	1.01 (8.67)	-11.4 (26.3)	-10.7 (26.1)	-0.244 (0.783)	-0.310 (0.793)
field_chemistry	-0.191 (0.136)	-0.196 (0.135)	-0.071 (0.177)	-0.090 (0.174)	-0.209 (0.154)	-0.191 (0.158)	-0.524*** (0.170)	-0.532*** (0.167)	-0.172 (0.200)	-0.173 (0.189)	-0.209 (0.154)	-0.191 (0.158)	-2.16* (1.16)	-2.10° (1.16)	-0.974 (2.04)	-0.885 (2.05)	-0.209 (0.154)	-0.191 (0.158)
field_computer_science	-0.210 (0.269)	-0.211 (0.271)	-0.366 (0.786)	-0.313 (0.781)	-0.349 (0.398)	-0.334 (0.397)	-0.178 (0.403)	-0.169 (0.398)	(0.209) 0.561 (1.10)	(0.189) 0.553 (1.04)	-0.349 (0.398)	-0.334 (0.397)	-0.542 (1.77)	-0.652 (1.77)	-1.40 (5.74)	-1.54 (5.67)	-0.349	-0.334 (0.397)
field_decision_sciences	-0.541	-0.537	-4.51	-4.41	-0.059 (0.588)	-0.068 (0.588)	-1.74	-1.74	-2.21	-2.28	-0.059 (0.588)	-0.068 (0.588)	2.96	3.25	-19.2	-20.3	-0.059 (0.588)	-0.068
field_dentistry	(0.674) 0.687	(0.676) 0.653	(2.87)	(2.77)	0.187	0.219	(1.28) 2.16	(1.28) 2.14	(1.60) 4.82	(1.58) 4.77		0.219	(8.81)	(8.78) -5.65	(24.4) -19.1	(24.6) -19.1	0.187	(0.588) 0.219
field earth and planetary sciences	(1.03) -0.423	(1.02) -0.424	(5.79) -0.631	(5.80) -0.634	(1.12) -0.419	(1.12) -0.423	(1.86)	(1.87)	(6.06) -2.58	(6.07) -2.61	(1.12)	(1.12) -0.423	(3.97)	(3.97)	(24.3) -17.5	(24.5) -17.3	(1.12) -0.419	(1.12) -0.423
field economics econometries and finance	(0.346)	(0.350)	(0.447)	(0.461) -7.63	(0.357)	(0.359)	(0.716) 0.239	(0.714) 0.250	(1.66)	(1.57)	(0.357)	(0.359)	(8.86) -9.02	(8.76) -9.22	(22.4) 1.79	(22.7)	(0.357)	(0.359)
field-energy	(2.82) -0.408	(2.82)	-7.79 (5.32) -1.34**	(5.26)	(2.35) -0.351	-3.29 (2.36) -0.381	(3.99)	(4.00) -0.502	(5.22)	(5.12) -0.708	(2.35)	(2.36) -0.381	(7.34) -2.73	(7.30) -2.63	(21.6)	(20.9)	(2.35)	(2.36) -0.381
	(0.407)	-0.401 (0.401) -0.180	-1.34** (0.625) -1.53**	-1.39** (0.620) -1.50**	(0.490)	(0.486)	(0.341)	(0.339)	(0.522)	(0.483)	-0.351 (0.490) -0.079	(0.486)	(5.72)	(5.67)	2.59 (10.6) -5.67	2.31 (10.6) -6.08	(0.490)	(0.486)
field_engineering	-0.178 (0.226)	(0.226)	(0.689)	(0.692)	-0.079 (0.231)	-0.077 (0.232)	-0.187 (0.254)	-0.187 (0.249)	0.084 (0.525)	0.080 (0.480)	(0.231)	-0.077 (0.232)	-2.18 (1.55)	-2.19 (1.58)	(4.49)	(4.66)	-0.079 (0.231)	-0.077 (0.232)
field_environmental_science	-0.614** (0.276)	-0.611** (0.277)	(0.598)	(0.607)	-0.368 (0.250)	-0.355 (0.248)	-0.205 (0.266)	-0.203 (0.264)	(0.510)	0.263 (0.397)	-0.368 (0.250)	-0.355 (0.248)	-3.22 (2.10)	-3.18 (2.09)	-6.10 (7.00)	-5.53 (6.86)	-0.368 (0.250)	-0.355 (0.248)
field_health_professions	-0.593 (1.14)	-0.614	-7.59** (3.26)	-7.65** (3.31)	1.07 (1.45)	(1.44)	3.04	3.03	(2.28)	(2.27)	1.07	1.07	-1.36 (2.89)	-1.39 (2.90)	10.2	-10.3 (6.45)	1.07	(1.44)
field_immunology_and_microbiology	-0.372	(1.14) -0.373	-0.634	-0.653	-0.365	-0.369	0.027	0.030	0.355	0.366	-0.365	(1.44) -0.369 (0.278)	-0.679	-0.676	(6.20) 0.032	0.098	-0.365	-0.369
field_materials_science	(0.225) -0.157	(0.224) -0.163	(0.722) -0.123	(0.724) -0.134	(0.277) -0.299	(0.278)	(0.266) -0.234*	(0.261) -0.228*	(0.449) -0.314	(0.401) -0.293*	(0.277)	-0.293	(0.616) -0.208	(0.625) -0.270	(3.66) 2.83	(3.65)	(0.277) -0.299	(0.278) -0.293
field_mathematics	(0.229) 13.3***	(0.231) 13.3***	(0.321) 35.0**	(0.325) 34.8**	(0.266) 18.1***	(0.264) 17.9***	(0.133) 4.29	(0.123) 4.28	(0.186) 4.37	(0.168) 4.34	(0.266) 18.1***	(0.264) 17.9***	(1.93) 25.4***	(1.94) 25.4***	(5.24) 45.5	(5.25) 45.7	(0.266) 18.1***	(0.264) 17.9***
field_medicine	(3.94) 1.90*** (0.565)	(3.95) 1.90***	(14.4) 2.96***	(14.5) 2.98***	(5.93) 2.01***	(5.86) 2.00***	(2.67) 0.454**	(2.66) 0.454**	(2.76) 0.328	(2.75) 0.329	(5.93) 2.01***	(5.86) 2.00***	(8.35) 1.73***	(8.42) 1.73*** (0.552)	(33.7) 3.48**	(33.6)	(5.93) 2.01***	(5.86) 2.00***
field_neuroscience	(0.565)	(0.566)	(1.03)	(1.04)	(0.551)	(0.549)	(0.183)	(0.182)	(0.259)	(0.246)	(0.551)	(0.549)	(0.550) -1.85*	(0.552) -1.85*	(1.37)	(1.38)	(0.551)	(0.549)
field_nursing	(0.154)	(0.157)	(0.442)	(0.447)	(0.185)	(0.184)	(0.206)	(0.195)	(1.00) 0.339	(0.895) 0.357	(0.185)	(0.184)	(1.00)	(1.00)	(2.74)	(2.73)	(0.185)	(0.184)
	(0.233)	(0.233)	(0.893)	(0.885)	(0.393)	(0.387)	(0.295)	(0.292)	(0.602)	(0.556)	-0.636 (0.393)	(0.387)	(1.82)	(1.81)	(7.88)	(7.84)	(0.393)	-0.632 (0.387)
field pharmacology toxicology and pharmaceutics	-0.192 (0.641)	-0.186 (0.644)	-0.695 (0.617)	-0.732 (0.630)	-0.367 (0.427)	-0.402 (0.414)	0.734 (0.775)	(0.734)	0.599 (1.50)	0.602	-0.367 (0.427)	-0.402 (0.414)	-3.60° (2.04)	-3.72* (2.07)	-7.33 (6.48)	-7.61 (6.48)	-0.367 (0.427)	-0.402 (0.414)
field_physics_and_astronomy	-0.197 (0.180)	-0.205 (0.180)	(0.533)	(0.529)	-0.311 (0.191)	-0.339* (0.194)	-0.264 (0.249)	-0.262 (0.241)	-0.230 (0.341)	-0.233 (0.302)	-0.311 (0.191)	-0.339* (0.194)	-0.673 (2.61)	-0.614 (2.58)	-11.0 (6.68)	-11.1 (6.84)	-0.311 (0.191)	-0.339* (0.194)
field_psychology	3.06***	3.09***	(0.533) -0.593 (5.05)	(0.529) -0.574 (5.04)	2.30**	2.32**	1.63	1.64	9.36	9.36	2.30**	(1.04)	2.95	2.86	(6.68) 1.99 (19.5)	(6.84) 1.89 (19.3)	2.30**	2.32**
field_social_sciences	5.49** (2.10)	5.51**	11.2*	11.4° (6.46)	6.28** (3.06)	6.25**	3.99 (2.70)	3.97 (2.69)	-0.203	-0.174	6.28** (3.06)	6.25**	17.5** (8.06)	17.3**	69.2*	68.51	6.28** (3.06)	6.25**
field.veterinary	-2.60**	(2.10) -2.60**	(6.51) -0.754	-0.649	-2.65*	(3.00) -2.78*	-1.06	-1.08	(1.73) 0.069	(1.70) 0.058	-2.65*	(3.00) -2.78*	-9.07	(7.99) -8.95	(39.4)	(39.7)	-2.65*	(3.00) -2.78*
mesh.	(1.24) 8.59	(1.25) 8.63	(2.23) 39.2**	(2.18) 39.6**	(1.54) 5.81	(1.56) 5.82	(0.865) 8.57**	(0.867) 8.57**	(0.900) 5.66	(0.881) 5.62	(1.54) 5.81	(1.56) 5.82	(5.88) 33.2	(5.89) 34.3*	(8.87) 80.4	(9.42) 80.7	(1.54) 5.81	(1.56) 5.82
mesh-A	(5.31)	(5.33)	(15.4)	(15.5)	(3.55)	(3.57)	(3.78)	(3.77)	(4.42)	(4.37)	(3.55)	(3.57)	(19.7)	(20.1) 0.570	(53.6) 1.94	(53.6)	(3.55)	(3.57)
mesh.B	0.010 (0.148) 0.731***	(0.148)	(0.395)	(0.398)	(0.137)	(0.140)	(0.120)	(0.117)	(0.282)	(0.222)	(0.137)	(0.140)	(0.550)	(0.552) 1.99**	(2.48)	2.06 (2.45) 1.18	(0.137)	(0.140)
· · ·	(0.249)	(0.250)	(0.525)	(0.532)	(0.204)	(0.203)	(0.497)	(0.497) 0.827**	(0.423)	(0.342)	(0.204)	(0.203)	(0.747)	(0.745)	(2.47)	(2.44)	(0.204)	(0.203)
mesh_C	0.388* (0.216)	(0.217)	-0.664 (0.975)	-0.678 (0.977)	0.566** (0.277)	(0.276)	0.828** (0.360)	(0.358)	1.02° (0.549)	1.02** (0.493)	0.566** (0.277)	(0.276)	-0.351 (0.553)	-0.388 (0.556)	-1.65 (2.62)	-1.74 (2.61)	0.566** (0.277)	0.572** (0.276)
mesh_D	(0.079)	(0.080)	0.263** (0.114)	0.274** (0.115)	0.309*** (0.104)	0.309*** (0.104)	0.019 (0.053)	0.020 (0.051)	0.035 (0.085)	0.036 (0.060)	0.309*** (0.104)	(0.104)	1.29*** (0.423)	1.29*** (0.425)	1.09 (0.851)	1.07 (0.850)	0.309*** (0.104)	0.309*** (0.104)
mesh,E	(0.236)	(0.239)	0.641	0.648	(0.611**	0.613**	-0.0001 (0.275)	-0.0006 (0.273)	0.338	0.327	0.611**	0.613**	2.17*	2.17*	3.05	3.16	(0.236)	0.613**
mesh_F	-0.493	-0.495	-3.46**	-3.42**	-0.930*	-0.951*	-0.152	-0.153	-1.56	-1.58	-0.930°	-0.951*	-0.390	-0.361	-1.24 (4.38)	-0.628	-0.930*	-0.951*
mesh_G	(0.320) 0.140	(0.321) 0.142	(1.39)	(1.39) 0.068	(0.516) 0.152	(0.519) 0.153	(0.353) 0.015	(0.348) 0.016	(1.17) 0.099	(1.13) 0.097 (0.107)	(0.516) 0.152	(0.519) 0.153	(1.17) 0.891	(1.16) 0.910*	2.24	(4.27) 2.31	(0.516) 0.152	(0.519) 0.153
mesh_H	(0.108) 0.348	(0.109) 0.358	(0.194) 0.843	(0.193) 0.894	(0.126) 0.540	(0.125) 0.524	(0.115) 0.843	(0.112) 0.840	(0.132)		(0.126) 0.540	(0.125) 0.524	(0.538) 5.05*	(0.535) 5.07*	(1.63) -9.97	(1.63) -9.90	(0.126) 0.540	(0.125) 0.524
meshI	(0.383) -1.98	(0.386) -2.01	(2.64)	(2.66) -11.0	(0.511)	(0.509)	(0.769)	(0.763)	(4.13) -4.03	(4.10) -4.13*	(0.511) -1.73	(0.509)	(2.87)	(2.86) -9.85	(15.3) -11.7	(15.2) -11.0	(0.511) -1.73	(0.509) -1.77
mesh.J	(1.35)	(1.35)	(7.08) 1.38	(7.12) 1.38	(1.52) 0.331*	(1.53)	(2.71) 0.549*	(2.72)	(2.46)	(2.44)	(1.52)	(1.53)	(6.52)	(6.54)	(19.6)	(20.1)	(1.52) 0.331*	(1.53) 0.325
mesh K	(0.198)	(0.200)	(0.904)	(0.915)	(0.194)	(0.198)	(0.300)	(0.301)	(0.524)	(0.445)	(0.194)	(0.198)	(1.39)	(1.36)	(11.7)	(11.5)	(0.194)	(0.198)
mesh_R	-5.64 (3.50)	-5.55 (3.46)	-16.6* (8.98)	-16.2* (8.68)	-8.71** (3.28)	-8.52** (3.22)	-5.56 (3.91)	-5.60 (3.89)	-4.70 (3.16)	-4.70 (3.21)	-8.71** (3.28)	-8.52** (3.22)	-13.3 (8.77) -2.03	-13.1 (8.63)	-50.1 (55.4)	-44.9 (53.4)	-8.71** (3.28)	-8.52** (3.22)
mesh_L	0.503 (0.326)	0.504 (0.326)	-0.837 (0.512)	-0.849 (0.508)	0.218 (0.198)	0.215 (0.196)	0.855 (0.674)	0.854 (0.673)	0.263	0.250 (0.547)	0.218 (0.198)	0.215 (0.196)	(1.94)	-1.97 (1.94)	-10.0 (6.03)	-10.4 (6.14)	0.218 (0.198)	0.215 (0.196)
mesh_M	4.29**	4.28** (1.80)	19.3*** (6.41)	19.4*** (6.42)	4.70** (2.03)	4.69** (2.03)	1.38	1.37 (1.03)	0.387	0.422	4.70**	4.69** (2.03)	6.91**	6.98**	40.3*** (14.6)	40.2*** (14.7)	4.70**	4.69** (2.03)
mesh_N	(1.80) 1.45*** (0.486)	1.46***	(5.55° (3.52)	(5.42) 6.57* (3.52)	1.85***	1.86***	1.65**	1.66**	0.678	(2.05) 0.742 (1.91)	(2.03) 1.85*** (0.646)	1.86*** (0.649)	(3.20) 3.54* (1.94)	3.56° (1.94)	11.3 (10.5)	10.7	(2.03) 1.85*** (0.646)	1.86***
mesh_Z	1.07	1.09	14.9**	15.0**	1.19	1.24	1.71	1.72	1.29	1.15	1.19	1.24	8.16*	8.21"	16.1	16.5	1.19	1.24
mesh.n	(0.871)	(0.878) 0.841	(6.97) 1.90	(6.96) 1.83	(1.18) 0.564	(1.19) 0.534	(1.77)	(1.76)	(4.41) 4.22	(4.36) 4.22	(1.18) 0.564	(1.19) 0.534	(4.26) 4.90°	(4.27) 4.87°	(14.9)	(14.8) -3.30	(1.18) 0.564	(1.19) 0.534
AlphaFold × Counterfactual AI	(1.04)	(1.04) -0.001	(4.28) 0.015	(4.30) 0.005*	(1.00)	(1.01) 0.002**	(0.907) 0.004	(0.910) -0.0002	(4.21) -0.014	(4.20) -0.0006	(1.00)	(1.01)	(2.57) -0.527*	(2.57)	(11.9) 0.017	(11.8) 0.041	(1.00)	(1.01) 0.002**
AlphaFold × Counterfactual No AI	(0.088)	(0.004)	(0.036)	(0.003)	(0.030)	(0.0008) -0.0008**	(0.019)	(0.0009)	(0.030)	(0.001)	(0.030)	(0.0008)	(0.266)	(0.022)	(0.211)	(0.120)	(0.030)	(0.0008)
	(0.030)	(0.0004)	(0.062)	(0.002)	(0.043)	(0.0004)	(0.020)	(0.0001)	(0.038)	(0.0003)	(0.043)	(0.0004)	(0.147)	(0.011)	(0.349)	(0.024)	(0.043)	(0.0004)
Alpha Fold - Method $\times$ Counterfactual AI - Method	-0.037 (0.057)	-0.065*** (0.021)	-0.112*** (0.020)	-0.056*** (0.017)	0.015 (0.009)	0.015* (0.007) -0.0008	-0.068** (0.026)	-0.060*** (0.010)	-0.064 (0.046)	-0.057** (0.021)	0.015 (0.009)	0.015* (0.007)					0.015 (0.009) -0.001	0.015* (0.007)
Alpha Fold - Method $\times$ Counterfactual No AI - Method	(0.003)	0.009 (0.013)	0.013 (0.013)	(0.031 (0.021)	-0.001 (0.0007)	-0.0008 (0.0005)	-0.007* (0.004)	-0.011*** (0.001)	0.014 (0.033)	0.038* (0.021)	-0.001 (0.0007)	-0.0008 (0.0005)	(0.014)	0.063 (0.079)			-0.001 (0.0007)	-0.0008 (0.0005)
Fixed-effects	**	**	4-	**			**	**		**	**		4-	**				
pi_id onarter_vear	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
institution_type institution_cited_by_count	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
institution_2yr_mean_citedness institution_b index	Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes
institution_i10_index	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
institution_country_code covid_share_2020	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Fit statistics Observations	87,284	87,284	20.649	20,649	78,819	78,819	42,436	42,436	11,484	11.484	78,819	78,819	22.584	22,584	4,401	4,401	78,819	78.819
R <sup>2</sup> Mean(Dep. Var.)	0.25	0.25	0.29	0.29	0.25	0.26	0.22	0.22	0.28	0.28	0.25	0.26	0.39	0.39	0.48	0.48	0.25	0.26
mean(nep. var.)	0.046	0.046	0.046	0.046	0.049	0.049	0.022	0.022	0.016	0.016	0.049	0.049	0.118	0.118	0.151	0.151		

Chustered (pi\_id & quarter\_year) standard-errors in parentheses Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Dependent Variable:									ndb.sub	mission								
	All	PDB	All F High		CE	M.	All I	PDD	pdb_sub Molecula High		C	M	All I	DDD	Medi High		CE	M
Variables	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive	Extensive	Intensive
AlphaFold	0.0010 (0.012)	(0.007	(0.008	(0.018	-0.003 (0.008)	0.0003	(0.002	0.008	0.016	(0.018	-0.003 (0.008)	0.0003	-0.006 (0.020)	(0.004)	(0.028	(0.025	-0.003 (0.008)	0.0003 (0.001)
Counterfactual AI	-0.013 (0.014)	(0.003	-0.024 (0.031)	(0.012	(0.006	0.005	-0.020 (0.020)	(0.005)	-0.049 (0.041)	0.009	0.006	0.006	0.006	0.006 (0.016)	(0.049	0.017 (0.062)	0.006 (0.010)	0.006 (0.005)
Counterfactual No AI	-0.012 (0.014)	0.013*	-0.022 (0.039)	0.017 (0.017)	-0.008 (0.007)	0.002*	-0.011 (0.020)	0.013 (0.016)	0.005	0.009	-0.008 (0.007)	0.002* (0.001)	0.003	0.012 (0.017)	-0.026 (0.085)	0.009	-0.008 (0.007)	0.002*
AlphaFold - Method	0.012	0.003	0.012	0.004	0.007	0.002	0.027*	0.016	0.026	0.020	0.007	0.002	0.054	0.054	0.192	-0.195 (0.125)	0.002	(0.002)
Counterfactual AI - Method	(0.012) 0.039* (0.021)	0.026	(0.022) 0.055 (0.040)	(0.021) 0.029 (0.039)	(0.002) 0.006 (0.005)	(0.002) 0.005 (0.005)	(0.014) 0.060** (0.024)	(0.010)	(0.029) 0.127** (0.050)	(0.028) 0.096* (0.051)	(0.002) 0.006 (0.005)	0.005)	(0.049) -0.060 (0.051)	(0.048) -0.058 (0.050)	(0.122) -0.161 (0.158)	-0.162 (0.173)	(0.002) 0.006 (0.005)	0.006
Counterfactual No AI - Method	0.036 (0.032)	0.012 (0.027)	0.040	-0.015 (0.068)	0.001	-0.002 (0.004)	0.063*	0.032 (0.051)	0.078** (0.032)	0.039 (0.106)	0.001 (0.004)	-0.002 (0.004)	-0.033 (0.060)		-0.165 (0.112)	-0.183 (0.114)	0.001 (0.004)	-0.002 (0.004)
field agricultural and biological sciences			(0.053)	4.46**	-0.032		1.67*	(0.905)		8.23**		-0.026		(0.057)	11.5		-0.032 (0.268)	-0.026
field_arts_and_humanities	(0.253) -0.284	(0.254) -0.298	(1.69) -6.87	(1.70) -7.05 (4.48)	(0.268)	(0.268) -1.55*	3.70	3.61	(3.94) 2.43	(3.93) 2.15	(0.268) -1.55*	(0.268) -1.55*	(1.74) -0.067	(1.74)	(9.17) -8.98 (48.0)	(9.21) -9.07	-1.55*	(0.268) -1.55*
${\it field\_biochemistry\_genetics\_and\_molecular\_biology}$	(0.840) 2.09*** (0.438)	(0.835) 2.09*** (0.438)	(4.50) 5.43***	5.42***	(0.825) 2.08*** (0.500)	(0.824) 2.08*** (0.499)	(4.52) 1.63***	(4.49) 1.63***	(20.1) 4.24***	(19.8) 4.22***	(0.825) 2.08*** (0.500)	(0.824) 2.08*** (0.499)	(3.75) 0.612	(3.76)	3.53*	(48.5) 3.49°	(0.825) 2.08*** (0.500)	(0.824) 2.08*** (0.499)
${\it field\_business\_management\_and\_accounting}$	(0.438) -3.68* (1.85)	(0.438) -3.65* (1.84)	(0.937) -2.76 (8.91)	(0.929) -2.73 (8.92)	(0.500) -1.02 (4.09)	(0.459) -1.02 (4.10)	(0.318) -8.37** (3.37)	(0.321) -8.29** (3.35)	(0.863) -7.31 (11.7)	(0.865) -7.42 (11.8)	(0.500) -1.02 (4.09)	(0.499) -1.02 (4.10)	(0.485) 5.59 (10.9)	(0.486) 5.51 (11.0)	(1.96) 45.5 (70.7)	(1.94) 43.5 (69.2)	(0.500) -1.02 (4.09)	(0.499) -1.02 (4.10)
field_chemical_engineering	-1.45	-1.39	7.07	7.21	-1.74	-1.71	-0.265	-0.172	(11.7) 25.0 (15.4)	24.9	-1.74	-1.71	1.49	1.45	14.5	14.8	-1.74	-1.71
field_chemistry	(2.30) 0.735	(2.30) 0.739	(6.64) 0.066	(6.66) 0.074	(2.77) 1.04	(2.78) 1.04	(4.86) 2.42**	(4.85) 2.45**	3.89	(15.2) 3.95	(2.77) 1.04	(2.78) 1.04	(7.69) 3.06	(7.73) 3.05	(55.1) 0.991	(55.4) 0.785	(2.77) 1.04	(2.78) 1.04
field_computer_science	(0.677) -0.396	(0.677) -0.416	(1.62) -0.436	(1.63) -0.528	(0.705) 0.012	(0.704) 0.0006	(1.13) -1.22	(1.13) -1.25	(3.12) -4.38	(3.12) -4.52	(0.705) 0.012	(0.704) 0.0006	(2.60) 2.00	(2.59) 1.93	(8.33) 14.7	(8.32) 14.2	(0.705) 0.012	(0.704) 0.0006
field decision sciences	(0.560) 1.78*	(0.563) 1.78*	(3.19) 15.3	(3.22) 14.8	(0.826) 1.48	(0.829) 1.47	(1.28) 5.54*	(1.28) 5.48*	(4.73) 19.8*	(4.77) 19.6*	(0.826) 1.48	(0.829) 1.47	(3.33)	(3.33) -4.75	(15.0) -57.3	(15.0) -59.3	(0.826) 1.48	(0.829) 1.47
field_dentistry	(0.933)	(0.932)	(9.38) 5.50	(9.40) 5.59	(0.899)	(0.888)	(2.98) 3.51*	(2.94) 3.57*	(11.5) 11.5	(11.3) 11.7	(0.899) -0.076	(0.888)	(7.70) -2.76	(7.67) -2.75	(80.8) 26.0	(80.3) 25.7	(0.899) -0.076	(0.888)
field_earth_and_planetary_sciences	(0.993) -1.96**	(0.996) -1.94**	(8.01)	(7.96) -5.40***	(1.03) -1.61	(1.03)	(2.01) -2.51	(2.01)	(8.53) -12.8	(8.43)	(1.03)	(1.03)	(2.81) 2.74	(2.80) 2.61	(36.9) 40.2	(37.2) 39.8	(1.03) -1.61	(1.03) -1.60
field economics econometrics and finance		(0.778)	(1.08)	(1.08)	(0.982)	(0.976)	(3.64)	(3.64)	(12.1)	(12.1)	(0.982)	(0.976)	(22.3)	(22.2)	(103.8)	(103.9) -22.6 (19.9)	(0.982)	(0.976)
field-energy	-0.027 (1.88) 5.72***	(1.90) 5.72***	4.80 (8.62) 7.26	4.94 (8.67) 7.23	(2.01) 6.93***	0.370 (2.01) 6.93***	(4.85)	(4.85) 8.31**	(23.7) 18.4	(23.7) 18.4	0.368 (2.01) 6.93***	0.370 (2.01) 6.93***	-10.4** (3.85) 31.3	-10.6*** (3.82) 31.3	-22.9 (20.2) 33.7	33.1	(2.01)	0.370 (2.01) 6.93***
field_engineering	(1.96)	(1.96)	(6.15) -0.365	(6.17)	(2.28) -0.666*	(2.27)	(3.38)	(3.39)	(11.3)	(11.4)	(2.28) -0.666*	(2.27) -0.662	(25.3) -4.51**	(25.3) -4.51**	(39.5)	(39.6)	(2.28) -0.666*	(2.27) -0.662
field_environmental_science	(0.280)	(0.281)	(1.57) 11.7***	(1.58)	(0.391)	(0.392)	(0.851)	(0.853)	(2.84)	(2.84)	(0.391)	(0.392)	(1.69)	(1.68)	(8.35) 19.3**	(8.40)	(0.391)	(0.392)
field health professions	(0.667)	(0.665)	(2.02)	(2.00) 5.83	3.23*** (0.773) -1.21	3.24*** (0.771) -1.19	5.65*** (1.21) -5.08*	(1.21)	(3.12)	(3.09)	3.23*** (0.773) -1.21	3.24*** (0.771) -1.19	(2.45) -2.55	(2.46) -2.55	(9.30) -2.40	19.1** (9.31) -2.52	3.23*** (0.773) -1.21	3.24*** (0.771) -1.19
field_immunology_and_microbiology	(1.03)	(1.03)	(5.87) 8.58***	(5.89) 8.63***	(0.925) 1.32*	(0.924) 1.32*	(2.92)	(2.93)	(12.9)	(12.9) -0.594	(0.925) 1.32*	(0.924) 1.32*	(1.71)	(1.71)	(10.5) 13.8***	(10.5) 13.7***	(0.925) 1.32*	(0.924) 1.32*
field_materials_ocience	(0.746)	(0.745)	(2.38) 4.59***	(2.38) 4.64***	(0.659)	(0.658)	(0.643)	(0.637)	(2.29)	(2.27)	(0.659)	(0.658)	(1.11)	(1.11) 8.31***	(4.57)	(4.54) 27.5***	(0.659)	(0.658)
field_mathematics	(0.606) 0.492	(0.606) 0.446	(1.42) -1.24	(1.42) -1.90	2.06*** (0.564) 1.23	2.06*** (0.564) 1.16	6.97*** (1.25) 2.04	(1.24) 1.98	(2.69) 5.78	(2.69) 4.95	2.06*** (0.564) 1.23	2.06*** (0.564) 1.16	8.30*** (2.20) -2.85	(2.20)	(7.32) -6.13	(7.28) -7.07	2.06*** (0.564) 1.23	2.06*** (0.564) 1.16
	(1.70)	(1.70)	-1.24 (10.2) 3.51***	-1.90 (10.2) 3.54***	(1.84)	(1.84)	(2.43)	(2.41)	(8.44)	(8.66)	(1.84)	(1.84)	(3.79)	(3.76)	(22.5)	(22.5)	(1.84)	(1.84)
field_medicine	1.03** (0.443)	1.03** (0.443)	(1.16)	(1.16)	0.709* (0.392)	0.703* (0.392)	1.05** (0.495)	1.05** (0.493)	3.95** (1.63)	3.93** (1.61)	0.709* (0.392)	0.703* (0.392)	0.387 (0.254)	0.391 (0.255)	1.48 (0.950)	1.52 (0.967)	0.709* (0.392)	0.703* (0.392)
field_neuroscience	1.56*** (0.455)	(0.457)	(2.85)	(2.86)	(0.453)	1.31*** (0.454)	3.24*** (0.896)	3.25*** (0.901)	19.2*** (4.75)	19.3*** (4.81)	1.31*** (0.453)	1.31*** (0.454)	-0.558 (0.678)	-0.534 (0.682)	2.92 (6.81)	3.04 (6.82)	1.31*** (0.453)	(0.454)
field_nursing	1.41 (0.842) 2.61**	1.43* (0.835)	1.67 (4.74)	1.79 (4.75) 6.22	1.59* (0.904)	(0.899)	4.10** (1.81) 8.64***	4.13** (1.80) 8.61***	2.54 (6.99) 17.1**	2.65 (6.99) 17.1**	1.59* (0.904) 1.11	1.60° (0.899)	0.147 (1.75) -4.48*	0.170 (1.75) -4.48*	(15.9)	(15.9)	1.59° (0.904)	1.60° (0.899)
field pharmacology toxicology and pharmaceutics	(1.16)	2.56** (1.16)	6.22	(4.17)	1.11	1.10	(2.82)	(2.82)	(6.68)	(6.67)	(1.01)	1.10 (1.01)	-4.48* (2.61)	(2.61)	-26.8** (10.2)	-26.8** (10.3)	1.11	1.10
field physics and astronomy	0.070 (0.722)	0.096 (0.721)	-0.368 (2.29)	-0.286 (2.28)	-0.511 (0.883)	-0.501 (0.885)	-0.124 (1.81)	-0.101 (1.81)	-4.33 (4.37)	-4.38 (4.39)	-0.511 (0.883)	-0.501 (0.885)	7.47 (5.21)	7.51 (5.20)	9.84 (17.2)	10.1 (17.2)	-0.511 (0.883)	-0.501 (0.885)
field_psychology	(0.842)	(0.842)	5.30 (10.6) -4.92	5.22 (10.7) -4.62	-0.323 (0.673) -0.659	-0.333 (0.672) -0.668	2.76 (2.40)	2.79 (2.39) -2.84*	50.1" (25.2) -6.46	49.9* (25.4) -6.17	-0.323 (0.673) -0.659	-0.333 (0.672) -0.668	0.935 (1.50) -2.33	(1.48)		-6.26 (14.1) -17.9	-0.323 (0.673) -0.659	-0.333 (0.672) -0.668
field_social_sciences	-1.12 (0.889)	-1.11 (0.884)	-4.92 (5.40)	-4.62 (5.40)	-0.659 (0.912)	-0.668 (0.910)	-2.85* (1.61)	-2.84* (1.62)	-6.46 (6.74)	-6.17 (6.82)	-0.659 (0.912)	-0.668 (0.910)	-2.33 (1.95)	-2.21 (1.93)	(14.0) -20.1 (12.0)	-17.9 (11.2)	-0.659 (0.912)	-0.668 (0.910)
field veterinary	-0.201 (2.68)	-0.185 (2.68)	5.62 (10.9)	5.43 (11.0)	(3.49)	(3.49)	4.11 (7.84)	4.18 (7.86)	26.3 (19.2)	26.4 (19.2)	(3.49)	(3.49)	-8.51*** (2.89)	-8.54*** (2.91)	-27.9 (21.9)	-28.5 (22.2)	(3.49)	0.405 (3.49)
mesh.		-0.536		5.62	-0.961 (2.26)	-0.898	2.01	2.13	3.71	(27.3)	-0.961		5.88	6.06	8.77	8.75	0.061	-0.898
$\mathrm{mesh}_{\sigma}A$	(2.23) -2.53*** (0.223)	(2.23) -2.54*** (0.222)	(21.5) -8.79*** (1.36)	(21.4) -8.80*** (1.35)	-2.41*** (0.257)	(2.28) -2.42*** (0.257)	(7.33) -2.58*** (0.377)	(7.34) -2.59*** (0.377)	(27.5) -6.98*** (1.90)	-7.02*** (1.90)	(2.26) -2.41*** (0.257)	(2.28) -2.42*** (0.257)	(13.7) -3.22*** (0.541)	-3.23*** (0.546)	(93.3) -8.57** (3.20)	(93.5) -8.55** (3.24)	(2.26) -2.41*** (0.257)	(2.28) -2.42*** (0.257)
mesh_B	(0.223)	1.66*** (0.290)	8.25*** (1.44)	8.22*** (1.43)	1.96*** (0.344)	1.97*** (0.344)	1.92*** (0.519)	1.91*** (0.518)	7.25*** (2.19)	7.22*** (2.20)	1.96*** (0.344)	1.97*** (0.344)	4.14*** (0.870)	4.13*** (0.865)	(3.88)	12.4***	1.96*** (0.344)	1.97*** (0.344)
mesh_C	-1 69***	-1.69***			-1.53***		-2 28***	-2.28***	7 99***	7.90***		-1.52***	-1 94***	-1 94***	11 7***	(3.84)	-1 53***	-1.52***
mesh,D	(0.223) 2.30*** (0.177)	(0.223) 2.30*** (0.178)	(1.36) 6.22*** (0.679)	(1.37) 6.21***	(0.242) 2.17*** (0.197)	(0.242) 2.17*** (0.197)	(0.375) 2.98*** (0.271)	(0.376) 2.98*** (0.271)	(2.17) 6.60*** (0.939)	(2.17) 6.60***	(0.242) 2.17*** (0.197)	(0.242) 2.17*** (0.197)	(0.389) 2.50*** (0.314)	(0.389) 2.49*** (0.316)	(3.31) 7.02*** (1.54)	(3.31) 6.98*** (1.56)	(0.242) 2.17*** (0.197)	(0.242) 2.17*** (0.197)
mesh_E	(0.177) 5.73*** (0.442)	(0.178) 5.73*** (0.442)	(2.07)	(0.678) 22.3*** (2.07)	(0.197) 4.63*** (0.480)	(0.197) 4.64*** (0.480)	(0.271) 7.76*** (0.755)	(0.271) 7.76*** (0.756)	22 2***	(0.939) 22.2*** (2.87)	(0.197) 4.63*** (0.480)	(0.197) 4.64*** (0.480)	(0.314) 8.43*** (1.16)	(0.316) 8.45*** (1.17)	(0.65)	(6.67)	(0.197) 4.63*** (0.480)	(0.197) 4.64*** (0.480)
mesh_F	-0.984**	-1.00**	1.16	1.26	-0.653°	-0.650°	-1.55	-1.57	(2.88) 7.14	6.98	-0.653*	-0.650°	-2.18**	-2.18**	-3.43	-3.74	-0.653*	-0.650°
mesh_G	(0.368)	(0.370) 2.27***	(4.03) 7.09***	(4.01) 7.07***	(0.334) 2.16***	(0.334) 2.15***	(0.941) 2.58***	(0.949) 2.57***	(6.91) 7.08***	(7.00) 7.06***	(0.334) 2.16***	(0.334) 2.15***	(0.981) 2.48***	(0.978) 2.47***	(9.51) 7.26**	(9.48) 7.16**	(0.334) 2.16***	(0.334)
mesh <sub>a</sub> H	(0.237)	(0.238) -3.69***	(0.929) -11.0**	(0.928) -11.3**	(0.242)	(0.242) -2.86***	(0.338) -5.16***	(0.340) -5.18***	(1.30) -13.5*	(1.31) -13.7*	(0.242)	(0.242) -2.86***	(0.680) -1.93	(0.676) -1.94	(3.11)	(3.13)	(0.242)	(0.242)
$\operatorname{mesh}_{\mathbf{J}}\mathbf{I}$	(0.604) 2.14**	(0.605) 2.16**	(4.40) 2.76	(4.43) 2.15	(0.681) 1.51*	(0.679) 1.52*	(1.21) 5.51*	(1.21) 5.53*	(7.52) 3.79	(7.51) 2.46	(0.681) 1.51*	(0.679) 1.52*	(2.70) -2.82	(2.72) -2.82	(21.3) -32.0	(21.4)	(0.681) 1.51*	(0.679) 1.52*
mesh_J	(0.992) -2.96***	(0.998)	(12.6) -10.4***	(12.4) -10.4***	(0.789)	(0.791) -2.95***	(2.86) -5.17***	(2.87) -5.19***	(30.8) -17.0***	(30.5)	(0.789)	(0.791)	(2.77)	(2.76) -6.64***	(28.9) -21.2	(28.8) -20.8	(0.789) -2.94***	(0.791)
mesh <sub>e</sub> K	(0.397)	(0.397)	(3.81)	(3.81)	(0.340)	(0.341)	(0.797)	(0.799)	(4.46)	(4.45)	(0.340)	(0.341)	(2.13)	(2.14) 8.81	(17.3)	(17.3)	(0.340)	(0.341)
mesh_L	(3.67)	(3.67)	(24.2)	(24.4)	(5.80) -1.14**	(5.78) -1.14**	(6.81)	(6.83)	(29.8)	(29.8)	(5.80) -1.14**	(5.78) -1.14**	(11.8) 3.54*	(11.6) 3.54*	(71.6) 11.2	(70.3) 11.4	(5.80)	(5.78) -1.14**
mesh.M	(0.348) 0.412	(0.347)	(2.37) 2.10	(2.39) 2.12	(0.462)	(0.460)	(0.551) 0.278	(0.550) 0.262	(2.93) -0.897	(2.94)	(0.462)	(0.460)	(1.91) 0.941	(1.92) 0.918	(11.6) 3.16	(11.6)	(0.462)	(0.460)
mesh N	(0.525)	(0.520)	(5.23)	(5.24)	(0.431)	(0.430)	(0.844)	(0.842)	(6.49)	(6.42)	(0.431)	(0.430)	(0.801)	(0.802)	(10.9)	(10.8)	(0.431)	(0.430)
mesh.Z	(0.384) 0.546	(0.385) 0.570	(4.15) -8.48	(4.13) -8.56	(0.356)	(0.362) -0.162	(1.01) -0.011	(1.01)	(5.23) 24.9**	(5.16) 24.8**	(0.356)	(0.362) -0.162	(1.01)	(1.01)	(9.85) -24.8	(9.80) -25.2	(0.356)	(0.362) -0.162
mach a	(0.792) -4.73***	(0.789) -4.75***	-8.48 (6.94) -14.3***	(6.83) -14.5***	-0.169 (1.21) -4.56***	-0.162 (1.21) -4.55***	-0.011 (1.88) -6.36***	(1.86)	(11.5)	(11.5)	-0.169 (1.21) -4.56***	-0.162 (1.21) -4.55***	(2.26) -5.62**	(2.25) -5.61**	-24.8 (16.4) 0.520	-29.2 (16.2) -0.012	-0.169 (1.21) -4.56***	-0.162 (1.21) -4.55***
mesn_n AlphaFold × Counterfactual AI	(0.867)	(0.868)	(4.84)	(4.82)	(0.718)	(0.719)	(1.72)	(1.72)	(7.63) 0.034	(7.60)	(0.718)	(0.719)	(2.33)	(2.33)	(14.9)	-0.012 (15.1) -0.029	(0.718)	(0.719)
	0.034 (0.055) 0.163**	(0.007)	(0.149)	(0.009)	(0.036)	(0.0009)	(0.072)	(0.010)	(0.171)	(0.010)	(0.036)	(0.0009)	(0.126)	(0.024)	-0.381 (0.502) 0.540	(0.184)	(0.036)	(0.0009)
AlphaFold × Counterfactual No AI	(0.077)	-0.000005 (0.0007)	(0.147)	(0.002)	0.010 (0.014)	-0.0002 (0.0001)	0.105 (0.082)	-0.0004 (0.001)	0.195 (0.166)	(0.002)	0.010 (0.014)	-0.0002 (0.0001)	(0.192)	(0.009)	(0.533)	(0.023 (0.032)	0.010 (0.014)	-0.0002 (0.0001)
$\label{eq:AlphaFold-Method} \begin{split} & \mbox{AlphaFold - Method} \times \mbox{Counterfactual AI - Method} \\ & \mbox{AlphaFold - Method} \times \mbox{Counterfactual No AI - Method} \end{split}$	-0.168*** (0.044) -0.018 (0.011)	-0.149*** (0.049) -0.013 (0.009)	-0.300*** (0.058) 0.049 (0.087)	-0.258*** (0.039) 0.142** (0.059)	-0.047*** (0.011) -0.0004* (0.0002)	-0.045*** (0.005) -0.0002 (0.0002)	-0.224*** (0.018) -0.019 (0.013)	-0.215 (0.174) -0.013 (0.012)	-0.310*** (0.080) 0.068 (0.063)	(0.026) (0.026) (0.119** (0.058)	-0.047*** (0.011) -0.0004* (0.0002)	-0.045*** (0.005) -0.0002 (0.0002)	0.006 (0.022)	-0.035 (0.063)			-0.047*** (0.011) -0.0004* (0.0002)	-0.045*** (0.006) -0.0002 (0.0002)
Fixed-effects							(0.013)					(0.0002)						
pi_id quarter_year institution_type	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes	Yes Yes Yes	Yes Yes Yes
institution_cited_by_count	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
institution_2yr_mean_citedness institution_b_index	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
institution_i10_index	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes
institution_country_code covid_share_2020	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes
Fit statistics Observations	87,284	87,284	20,649	20,649	78,819	78,819	42,436	42,436	11,484	11,484	78,819	78,819	22,584	22,584	4,401	4,401	78,819	78,819
R <sup>2</sup> Mean(Dep. Var.)	0.51	0.51 0.168	0.49	0.49	0.51	0.51	0.53	0.53	0.50 0.608	0.50 0.608	0.51	0.51	0.60	0.60 0.136	0.60 0.567	0.60 0.567	0.51 0.147	0.51

R<sup>2</sup> Mean(Dep. Var.)

Clustered (pi\_id & quarter\_year) standard-errors in parentheses Signif. Codes: \*\*\*: 0.01, \*\*: 0.05, \*: 0.1

Dependent Variable:									num,pubi	lications								
		PDB	All I High		-	EM		PDB	Molecu	lar Biology PDB		EM	Medicine All PDB High PDB CEM					
Variables	All	PDB Intensive	High Extensive	PDB Intensive	Extensive	Intensive	Extensive	PDB Intensive	High	PDB Intensive	Extensive	EM Intensive	Extensive	PDB Intensive	High Extensive	PDB Intensive	Extensive	EM Intensive
AlphaFold	0.648	-0.186 (0.192)	-2.59° (1.51)	-0.963* (0.474)	0.816	0.096	0.080	0.035	0.138	-0.081	0.816	0.096	-0.437	-0.314	-1.14	-0.756	0.816	0.096
Counterfactual AI	(0.740) 0.927 (1.13)	(0.192) 0.202 (0.465)	(1.51) 1.87 (2.09)	(0.474) 1.15 (1.07)	(0.853) 0.216 (0.884)	(0.103) -0.099 (0.279)	(0.151) 0.061 (0.118)	(0.045) -0.007 (0.159)	(0.363) -0.101 (0.233)	(0.099) -0.260** (0.123)	(0.853) 0.216 (0.884)	(0.103) -0.099 (0.279)	(0.364) 0.450 (0.591)	(0.253) 0.231 (0.223)	(1.05) 0.378 (0.647)	(0.698) 0.171 (0.582)	(0.853) 0.216 (0.884)	(0.103) -0.099 (0.279)
Counterfactual No AI	2.24*	0.802 (0.609)	5.09 (4.30)	2.03 (1.43)	1.35 (0.802)	0.135° (0.074)	0.182 (0.123)	0.078 (0.063)	0.098 (0.263)	-0.038 (0.043)	1.35 (0.802)	0.135° (0.074)	0.468 (0.728)	0.143 (0.183)	-0.273 (0.408)	-0.073 (0.180)	1.35 (0.802)	0.135° (0.074)
AlphaFold - Method	0.937*	1.00*		1.39	0.056	-n nna	0.137	0.054	(0.090)	0.136		-0.009	0.176	0.340	-0.123	0.409	0.056	-0.009
Counterfactual AI - Method	(0.482) -0.621 (1.81)	(0.545) -0.677 (2.03)	(1.04) 2.73 (2.62)	(0.987) 2.28 (2.64)	(0.066) -0.583 (0.928)	(0.062) -0.593 (1.07)	(0.168) 0.259 (0.214)	(0.138) 0.198 (0.245)	0.175	(0.114) 0.298 (0.313)	(0.066) -0.583 (0.928)	(0.062) -0.593 (1.07)	(0.299) -1.16 (0.884)	(0.360) -1.04 (0.925)	(0.667) -1.79 (1.71)	(1.11) -1.56 (2.01)	(0.066) -0.583 (0.928)	(0.062) -0.593 (1.07)
Counterfactual No AI - Method	0.852 (1.77)	0.144	-1.34 (2.00)	-4.67 (3.63)	-0.068 (0.338)	-0.128 (0.323)	0.160 (0.188)	-0.009 (0.204)	0.391*** (0.111)	0.538*** (0.144)	-0.068 (0.338)	-0.128 (0.323)	0.608 (0.738)	0.639 (0.764)	-0.184 (0.463)	0.032 (0.643)	-0.068 (0.338)	0.199
field_agricultural_and_biological_sciences	100.3**	(2.26) 100.2**		91.1	117.3***		60.3***	60.4***	65.2**			117.0***	110.3**		29.8	29.2	117.3***	(0.323) 117.0***
field_arts_and_humanities	(37.0) 139.4	(37.0) 139.3	(58.6) -369.2	(58.3) -367.5	(39.8) -120.3	(39.8) -119.8	(12.9) 218.5*	(13.1) 218.8*	(25.6) 497.3	(25.6) 499.0	(39.8) -120.3	(39.8) -119.8	(44.5) 357.1°	(44.6) 356.6*	(116.1) 218.8	(115.4) 212.6	(39.8) -120.3	(39.8) -119.8
field biochemistry genetics and molecular biology	(269.6) 106.8***	(269.6) 106.7*** (28.1)	(408.8) 114.1**	(407.7) 112.4**	(315.0) 110.0***	(314.8) 109.8***	(114.0) 119.2*** (20.5)	(114.3) 119.2***	(385.4) 173.0***	(387.3) 172.9***	(315.0) 110.0***	(314.8) 109.8***	(197.2) 231.8***	(197.5) 231.6***	(383.8) 371.2**	(388.9) 371.4**	(315.0) 110.0***	(314.8) 109.8***
field_business_management_and_accounting	(28.1) 273.1**	275.7**	(52.2) -45.4	(51.8) -33.2	(25.9) 127.5	(25.8) 127.1	100.0	(20.5) 100.0	(44.4) 110.5***	(44.3) 108.8***	(25.9) 127.5	(25.8) 127.1	(64.2) 151.3	(64.1) 156.0	(140.0) 84.2	(139.7) 94.3 (479.6)	(25.9) 127.5	(25.8) 127.1
field_chemical_engineering	(109.5) -249.9	(109.7) -252.0	(706.1) 357.5	(702.2) 362.8	(197.1) -594.5	(197.9) -596.3	(75.1) 91.1**	(75.3) 91.7**	(32.7) 162.9°	(31.7) 162.2*	(197.1) -594.5	(197.9) -596.3	(132.9) 144.6	(133.9) 141.9	(488.7) 1,281.6	(479.6) 1,263.8 (857.4)	(197.1) -594.5	(197.9) -596.3
field_chemistry	(209.7) 226.9	(209.7) 226.4	(623.3) 375.8	(625.1) 377.8	(410.6) -90.7	(411.2) -90.6	(34.9)	(35.1) 101.4***	(85.2) 149.7**	(84.2) 149.1**	(410.6) -90.7	(411.2) -90.6	(182.7) 78.9°	(183.2) 79.5*	(867.0) 31.5		(410.6) -90.7	(411.2) -90.6
field_computer_science	(253.2) -69.9	(253.1) -69.6	(424.2) 268.1	(425.0) 275.3	(139.1) -366.8	(139.2) -365.9	(26.1) 145.1***	(26.4) 145.3***	(66.6) 365.6**	(66.4) 366.3**	(139.1) -366.8	(139.2) -365.9	(43.0) 91.9**	(43.2) 93.4**	(202.2) 162.4	(200.6) 170.1	(139.1) -366.8	(139.2) -365.9
field_decision_sciences	-69.9 (255.6)	(255.5) -1.99	(209.6) 306.5	(210.9) 298.6	(331.0) 113.0	-365.9 (330.8) 112.2	(45.5) 17.8	(46.5) 18.4	(142.4)	(143.4)	(331.0) 113.0	(330.8) 112.2	(35.9)	(35.7) 253.7**	(101.7)	(106.7) -565.3	(331.0) 113.0	(330.8) 112.2
field deutistry	(84.4) -325.8	(84.4) -327.5	(352.1) -4.373.2	(350.7)	(91.8) -234.8	(91.8) -232.7	(40.0) 1.32	(40.1) 0.774	(119.6) -80.1	(117.7)	(91.8) -234.8	(91.8) -232.7	(116.9) 77.8	(116.8) 77.2	(643.8) 249.9	(640.9) 247.8	(91.8) -234.8	(91.8) -232.7
field earth and planetary sciences	(423.6)	(423.6)	(3,850.7) 4,154.9*	(3.854.0)	(430.1)	(429.2)	(37.4)	(37.4) 95.1***	(83.1)	(84.6)	(430.1)	(429.2)	(50.9)	(50.8)	(223.6)	(224.9)	(430.1)	(429.2)
field_economics_econometrics_and_finance	10,133.4*** (3,296.5) 390.8	10,133.4*** (3,296.6) 394.9	(2,258.1) -237.5	4,152.3* (2,257.3) -240.4	(2,992.9) 528.1°	10,269.5*** (2,992.9) 528.6*	95.3*** (22.8) 694.7	(22.8) 694.5	22.8 (79.2) 416.8	23.4 (78.3) 414.6	10,269.5*** (2,992.9) 528.1*	10,269.5*** (2,992.9) 528.6*	95.8 (125.4) 361.5***	99.7 (125.1) 366.9***	288.7 (505.8) 314.8***	295.6 (503.5) 298.2***	10,269.5*** (2,992.9) 528.1*	10,269.5*** (2,992.9) 528.6*
	(235.1)	(235.5)	(634.5)	(635.1)	(280.0)	(280.2)	(484.8)	(485.2) 64.5***	(250.1) 63.5***	(250.2)	(280.0)	(280.2)	(114.8)	(117.0)	(84.1)	(90.2)	(280.0)	(280.2)
field_emergy	7.62 (176.4)	6.40 (176.6)	471.8 (439.3)	472.9 (440.1)	-19.9 (166.2)	-20.8 (166.2)	64.4*** (19.2)	(19.2)	(18.0)	63.0*** (17.6)	-19.9 (166.2)	-20.8 (166.2)	-13.4 (124.4)	-4.98 (125.6)	-310.2 (221.2)	-290.1 (217.7)	-19.9 (166.2)	-20.8 (166.2)
field engineering	-276.0 (262.0)	-275.8 (261.9)	-1,022.2 (643.6)	-1,019.1 (643.2)	-324.0 (302.9)	-324.1 (302.9)	92.7*** (15.1)	92.7*** (17.1)	166.0*** (58.4)	165.8*** (58.5)	-324.0 (302.9)	-324.1 (302.9)	17.8 (41.4)	17.7 (41.0)	-137.1 (161.5)	-137.5 (160.7)	-324.0 (302.9)	-324.1 (302.9)
field_environmental_science	425.6 (262.7)	426.0 (262.4)	620.1 (834.9)	622.6 (835.3)	589.4 (396.4)	589.0 (396.4) 207.4**	(10.7)	71.0*** (10.8)	20.3 (36.4) -7.27	20.3 (36.5) -5.87	589.4 (396.4)	589.0 (396.4)	22.3 (37.9) 81.6°	(37.2)	-35.9 (119.2)	-32.3 (114.9)	589.4 (396.4)	589.0 (396.4) 207.4**
field_health_professions	144.6 (87.9)	141.9 (87.6)	137.5 (349.2)	(346.3)	(85.2)	(84.6)	(32.5)	(32.6)	(75.3)	(74.9)	208.6**	207.4**	(45.2)	81.4° (45.2)	-83.8 (150.1)	-83.3 (148.4)	(85.2)	(84.6)
field immunology and microbiology	105.5*** (18.2)	105.3*** (18.3)	115.7** (55.6)	115.0** (55.6)	124.5*** (19.5)	124.1*** (19.3)	106.8*** (28.7)	106.9*** (29.1)	63.1*** (22.5)	63.1*** (22.5)	124.5*** (19.5)	124.1*** (19.3)	69.2** (29.1)	69.0** (29.2)	132.1**	132.7** (58.9)	124.5*** (19.5)	124.1*** (19.3)
field_materials_science	69.0	68.4	29.0 (114.7)	27.8 (114.7)	145.4° (74.2)	145.3° (74.3)	54.2***	54 3***	39.4	39.2	145.4*	145.3° (74.3)	-2.14 (42.8)	-2.15 (42.6)	-177.6 (136.6)	-180.4	145.4*	145.3* (74.3)
field_mathematics	(70.5) -144.3 (254.8)	(70.5) -142.7 (253.4)	89.0	108.1	-356.4 (439.3)	-355.1 (439.1)	(13.1) 118.6 (92.6)	(13.1) 118.3 (92.5)	(35.0) 130.7 (180.7)	(35.1) 133.8 (180.4)	(74.2) -356.4 (439.3)	-355.1 (439.1)	164.8**	167.4***	358.7° (211.8)	(136.7) 382.2* (215.7)	(74.2) -356.4 (439.3)	-355.1 (439.1)
field_medicine	223.2*** (45.7)	223.1***	206.6*** (56.2)	208.0*** (56.4)	195.1***	(36.0)	151.6***	151.6*** (39.1)	161.4** (61.1)	161.6**	(35.9)	195.3*** (36.0)	196.6*** (34.3)	196.7*** (34.3)	214.3***	(215.7) 213.7*** (58.2)	195.1***	(36.0)
field_neuroscience	(45.7) 28.0 (49.9)	(45.7) 27.6	-411.8	-413.2	(35.9) 15.8 (53.2)	(36.0) 15.8 (53.3)	(39.0) 49.6*** (12.9)	49 6***	77.3***	(61.0) 76.6**	15.8	(36.0) 15.8 (53.3)	80.3***	80.2***	(58.6) -11.1 (69.5)		(35.9) 15.8 (53.2)	(36.0) 15.8 (53.3)
field_nursing	137.9***	(49.9) 136.2***	(253.8) 301.4	(254.3) 293.3	117.6*	117.4*	32.4**	(13.0) 32.4**	(28.1) -17.9	(28.4) -18.4	(53.2) 117.6*	117.4*	(24.2) -22.4	(24.2) -23.8	87.9	(68.9) 72.6	117.6*	117.4*
field_pharmacology_toxicology_and_pharmaceutics	(49.3) 145.0**	(48.9) 145.5**	(256.6) 346.7°	(255.4) 341.4°	(63.8) 148.6***	(63.7) 148.0***	(14.5) 160.3***	(14.5) 160.3***	(44.0) 191.5*	(44.1) 191.7*	(63.8) 148.6***	(63.7) 148.0***	(49.2) 188.7*	(49.2) 189.0*	(103.6) 628.6	(108.9) 629.9	(63.8) 148.6***	(63.7) 148.0***
field physics and astronomy	(59.9) 5,856.8	(60.3) 5,856.4	(187.9) 15,624.9**	(186.9) 15,625.8**	(53.6) 7,029.4	(53.6) 7,028.8	(50.6) 58.8***	(50.8) 58.9***	(97.5) 63.7*	(97.8) 63.5°	(53.6) 7,029.4	(53.6) 7,028.8	(99.3) 6.49	(99.3) 5.94	(547.8) 54.0	(545.8) 47.8	(53.6) 7,029.4	(53.6) 7,028.8
field_psychology	(4,736.2) 102.5	(4,736.2) 103.3	(7,064.2) 188.1	(7,065.3) 188.5	(5,227.4) 156.9*	(5,227.2) 157.1*	(14.4) 116.2***	(14.5) 116.5***	(35.7) 124.7	(35.4) 123.4	(5,227.4) 156.9*	(5,227.2) 157.1*	(43.3) 43.3	(43.8) 43.5	(182.4) 81.8	(181.4) 79.6	(5,227.4) 156.9*	(5,227.2) 157.1*
field social sciences	(119.6) 36.3	(119.8) 36.8	(355.6) 193.5	(360.3) 197.8	(79.8) -28.2	(79.9)	(38.8)	(38.8)	(87.3)	(87.1) 122.3**	(79.8)	(79.9)	(40.7) 56.6	(40.7) 55.4	(103.4) 244.9	(104.3) 226.8	(79.8)	(79.9)
field-veterinary	(78.1) 436.9	(77.7) 435.2	(242.1)	(238.4) -381.0	(95.5) 103.5	(95.5) 100.9	(20.5) 107.9**	(21.1) 107.9**	(47.9) 194.5	(47.7) 193.8	(95.5) 103.5	(95.5) 100.9	(81.3) 1.257.6	(80.9) 1.255.0	(250.1) 300.3*	(236.8) 311.5°	(95.5) 103.5	(95.5) 100.9
month .	(299.1) -327.4	(298.3) -325.0	(483.8) -798.4	(482.4) -803.5	(119.0) -234.0	(117.7) -233.9	(50.7)	(50.8)	(148.8) -281.5*	(148.0) -284.6*	(119.0) -234.0	(117.7) -233.9	(902.4) -57.0	(901.3) -56.5	(162.8) -481.5	(164.2) -490.9	(119.0) -234.0	(117.7)
mesh.A	(352.4)	(352.9) -25.0	(856.0) -27.8	(863.8) -25.7	(388.4)	(389.2)	(40.5) -4.70	(40.6) -4.70	(156.5) -1.77	(157.4) -1.46	(388.4)	(389.2)	(85.1)	(83.9) -10.5	(732.3) -53.1	(733.1) -54.6	(388.4)	(389.2)
· · ·	(25.8)	(25.7)	(88.1)	(88.1)	(30.7)	(30.5)	(4.47)	(4.43)	(12.5)	(12.3)	(30.7)	(30.5)	(8.09)	(8.09)	(46.8)	(46.9)	(30.7)	(30.5)
mesh_B	-41.1 (29.1)	-41.0 (29.1)	96.2 (111.2)	98.0 (111.1)	-96.5** (36.9)	-96.4** (36.9)	-20.8** (9.69)	-20.8** (9.71)	-15.7 (16.8)	-15.4 (16.6)	-96.5** (36.9)	-96.4** (36.9)	-70.0*** (21.4)	-69.8*** (21.4)	-20.5 (36.2)	-18.4 (37.3)	-96.5** (36.9)	-96.4** (36.9)
mesh <sub>s</sub> C	-7.64 (22.4)	-7.80 (22.4)	69.8 (87.6)	66.9 (87.6)	-8.60 (24.5)	-8.87 (24.5)	-18.5 (12.1)	-18.5 (12.2)	-20.0 (19.7)	-19.6 (19.6)	-8.60 (24.5)	-8.87 (24.5)	-19.6* (10.6)	-19.6° (10.6)	-51.1 (39.5)	-52.4 (39.8)	-8.60 (24.5)	-8.87 (24.5)
mesh_D	-19.9 (12.1)	-19.9 (12.1)	-37.5 (46.6)	-37.1 (46.5)	-2.00 (11.4)	-1.95 (11.4)	-8.61** (3.49)	-8.59** (3.49)	-16.3** (7.55)	-16.2** (7.46)	-2.00 (11.4)	-1.95 (11.4)	-18.9* (9.93)	-18.9° (9.87)	-18.4 (17.1)	-17.7 (16.7)	-2.00 (11.4)	-1.95 (11.4)
mesh.E	-104.9** (46.2)	-105.1** (46.2)	-311.2° (161.1)	-309.6* (161.4)	-67.7° (37.9)	-67.9° (38.0)	-9.02 (6.21)	-9.00 (6.33)	-30.3 (18.3)	-30.3 (18.3)	-67.7* (37.9)	-67.9* (38.0)	-44.6* (24.2)	-44.7° (24.2)	-78.0 (49.0)	-80.4 (49.6)	-67.7° (37.9)	-67.9* (38.0)
mesh,F	29.6 (40.7)	30.0 (40.7)	207.6 (215.8)	211.7 (219.1)	44.5 (38.7)	44.1 (38.6)	9.71 (9.22)	9.61 (9.24)	-0.486 (40.1)	0.209 (40.1)	44.5 (38.7)	44.1 (38.6)	21.3 (20.4)	21.1 (20.3)	37.6 (73.1)	34.3 (72.0)	44.5 (38.7)	44.1 (38.6)
$\mathrm{mesh}_a\mathrm{G}$	-24.8 (19.1)	-24.8 (19.1)	-30.8 (57.2)	-31.5 (57.2)	-20.6 (21.8)	-20.4 (21.8)	-8.75° (5.05)	-8.76° (5.07)	-20.8* (10.4)	-20.7° (10.4)	-20.6 (21.8)	-20.4 (21.8)	-23.5* (12.2)	-23.7* (12.2)	-93.7° (47.2)	-94.1° (46.8)	-20.6 (21.8)	-20.4 (21.8)
mesh_H	-302.7* (160.0)	-302.5* (159.9)	334.6	345.1 (534.4)	-286.4* (165.0)	-287.3° (165.4)	-15.7 (17.5)	-15.7 (17.6)	-38.4 (49.0)	-37.4 (48.7)	-286.4* (165.0)	-287.3* (165.4)	-86.9 (55.5)	-86.9 (54.9)	-223.1 (193.3)	-229.1 (198.5)	-286.4* (165.0)	-287.3* (165.4)
mehJ	-5.64 (215.3)	-5.83 (215.4)	-1,995.5 (1,191.6)	-2,003.9 (1,196.9)	150.3 (184.0)	149.4 (183.8)	-15.3 (25.8)	-15.7 (25.7)	45.5 (208.0)	53.5 (203.0)	150.3 (184.0)	149.4 (183.8)	31.8 (165.0)	31.3 (165.0)	-53.9 (305.7)	-52.5 (306.3)	150.3 (184.0)	149.4 (183.8)
mesh <sub>a</sub> J	6.07	6.23		335.7 (291.7)	-18.5 (35.6)	-18.3 (35.5)	-4.07	-4.06	-14.2	-13.3		-18.3 (35.5)	7.70 (28.6)	6.75	-145.3	-148.6	-18.5 (35.6)	-18.3 (35.5)
mesh_K	(25.8) -227.5	(25.8) -223.6	(290.6) -1,147.8	-1,134.8	-1,231.1	-1,221.6	(7.54) 77.0°	(7.48) 76.6*	(18.1) -90.9	(17.7) -87.7	(35.6) -1,231.1	-1,221.6	-138.8	(28.3) -137.2	(134.2) 407.6	(136.9) 419.5	-1,231.1	-1,221.6
mesh_L	(401.7) -15.8	(399.8) -15.9	(958.9) -167.6	(956.7) -166.8	(868.0) -32.3	(866.9) -32.5	(39.1) -8.15	(38.9) -8.07	(111.6) -19.5	(109.9) -20.1	(868.0) -32.3	(866.9) -32.5	(161.9) -10.2	(161.0) -10.7	(346.9) -159.0	(355.2) -159.0	(868.0) -32.3	(866.9) -32.5
mesh <sub>s</sub> M	(29.8) 175.8	(29.8) 176.4*	(207.0) 1,019.3*	(207.5) 1,029.9*	(52.4) 137.3	(52.6) 137.0	(6.48) -15.8	(6.59) -15.8	(22.4) -146.0*	(22.5) -145.0*	(52.4) 137.3	(52.6) 137.0	(25.1) -25.0	(25.2) -24.1	(122.4) -155.0°	(124.4) -162.7*	(52.4) 137.3	(52.6) 137.0
mesh_N	(104.3) -94.5	(104.3) -93.7	(511.6) -494.6	(518.5) -493.5	(85.1) -112.1*	(84.8) -111.5*	(20.6) -11.6	(20.7) -11.5	(82.2) 41.5	(81.8) 42.9	(85.1) -112.1*	(84.8) -111.5*	(18.9) 35.2 (32.5)	(18.8) 34.9 (32.5)	(82.3) 51.1	(85.3) 58.3	(85.1) -112.1*	(84.8) -111.5*
mesh.Z	(56.2) -246.5**	(56.0)	(393.1)	(391.6)	(60.1) -321.6**	(59.9)	(14.9) -13.3	(15.0) -12.9	(64.4) 57.3	(64.6) 50.9	(60.1)	(59.9) -320.8**			(80.0)	(79.2)	(60.1) -321.6**	(59.9) -320.8**
mesh-n	(114.0)	(114.1) -62.5	(434.9) -363.4	(434.8) -367.1	(122.3) -85.5	(122.2) -86.0	(20.4)	(20.4)	(100.5) 21.8	(99.3) 20.7	(122.3) -85.5	(122.2) -86.0	(41.8)	(41.8)	(173.9) 50.1	(178.0) 66.3	(122.3) -85.5	(122.2) -86.0
AlphaFold × Counterfactual AI	(72.6) -0.174	(72.5) -0.152	(979.6)	(381.5)	(92.3) -1.31	(92.3) -0.015	(12.4)	(12.6)	(60.5) -0.814	(59.3)	(92.3) -1.31	(92.3) -0.015	(49.4)	(43.3) 0.174	(80.9)	(84.3) -0.199		(92.3) -0.015
AlphaFold v Counterfactual No Al	(1.88)	(0.151)	-1.16 (4.74)	(0.245)	(1.54)	(0.033)	(0.387)	(0.212)	(0.840)	(0.031)	(1.54)	(0.033)	0.882 (0.736)	(0.177)	(2.64)	(1.11)	-1.31 (1.54)	(0.033)
AlphaFold × Counterfactual No Al AlphaFold - Method × Counterfactual AI - Method	(2.99) 8.43	(0.021)	(3.16)	(0.176)	(2.34)	(0.004) (0.781	(0.358) 2.56***	(0.005) 2.65**	(0.533) 3.00***	(0.002) 3.28***	(2.34)	(0.004) (0.781	(1.35)	(0.086)	(2.23)	(0.170)	(2.34)	(0.004) 0.781
	(8.11)	8.69 (7.99) -0.271	-3.45 (3.36)	-5.03 (4.42)	0.886 (0.720)				(0.401)	(0.457)	0.886 (0.720)						0.886 (0.720)	
${\bf AlphaFold \cdot Method \times Counterfactual\ No\ AI \cdot Method}$	-0.157 (0.511)	-0.271 (0.632)	1.66 (2.43)	5.79 (3.92)	-0.005 (0.013)	0.0010 (0.013)	-0.092** (0.036)	-0.184*** (0.056)	0.243 (0.282)	0.152 (0.386)	-0.005 (0.013)	0.0010 (0.013)	-0.052 (0.203)	-0.891 (0.686)			-0.005 (0.013)	0.0010 (0.013)
Fixed-effects pi.jel	Ves	Yes	Yes	Ves	Ves	Ves	Ves	Ves	Ves	Yes	Ves	Ves	Yes	Yes	Yes	Yes	You	Ves
quarter_year	Yes	Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes Yes	Yes Yes
institution_type institution_cited_by_count institution_2yr_mean_citedness	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes	Yes	Yes Yes Yes	Yes	Yes Yes Yes	Yes Yes Yes	Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes
	Yes	Yes	Yes	Yes	Yes	Yes	Yes Yes	Yes Yes	Yes	Yes Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes
institution i10 index institution country code	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
covid_share,2020 Fit statistics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	87,284	87,284	20,649	20,649	78,819	78,819	42,436	42,436	11,484	11,484	78,819	78,819	22,584	22,584	4,401	4,401	78,819	78,819
R <sup>2</sup> Mean(Dep. Var.)	0.50 5.638	0.50 5.638	0.65 5.228	0.65 5.228	0.54 5.389	0.54 5.389	0.60 3.928	0.60 3.928	0.52 4.445	0.52 4.445	0.54 5.389	0.54 5.389	0.66 5.278	0.66 5.278	0.62 5.085	0.62 5.085	0.54 5.389	0.54 5.389

Clustered (pi id & quarter year) standard-errors in parentheses