

Supplementary Materials

Table S1: Summary of connected component sizes

Statistic	Value
Max size	13,873
Min size	2
Mean size	5.50
Median size	2.0
Component Size Distribution	
Component Size	Number of Components
13,873	1
53	1
35	1
34	1
33	1
30	1
27	1
24	1
23	2
22	1
21	1
20	4
19	1
18	4
17	6
16	4
15	8
14	7
13	12
12	12
11	17
10	33
9	27
8	48
7	75
6	117
5	212
4	383
3	1115
2	3383

Table S2: Top 10 representative PIs in each cluster based on normalized degree

Cluster	Top Ten PIs (Normalized Degrees)
C0	RAMACHANDRAN, VASAN S (6.30) SESHADRI, SUDHA (6.30) MESCHIA, JAMES F (5.04) GERSZTEN, ROBERT E (5.04) HOWARD, GEORGE (4.61) BRODERICK, JOSEPH PAUL (4.19) PSATY, BRUCE M (4.19) PERREIRA, KRISTA M (3.77) KOTTON, DARRELL N. (3.35) SACCO, RALPH L. (3.35)
	SCAMPAGNA, LOUIS DANIEL (8.80)
	NDHLOVU, LISHOMWA C (7.27)
	HORVATH, TAMAS L (5.24)
	SPRINGER, SANDRA ANN (4.73)
	ROSENBERG, PAUL B (4.73)
	CARRICO, ADAM WAYNE (4.73)
	BUCH, SHILPA J. (3.71)
	IWASAKI, AKIKO (3.71)
	MIMIAGA, MATTHEW JAMES (3.21)
	SALTZMAN, W. MARK (3.21)
C1	MADABHUSHI, ANANT (7.68) OGEDEGBE, OLUGBENGA G. (5.30) MASON, CHRISTOPHER EDWARD (4.82) NIZET, VICTOR (4.82) WANG, GE (4.82) HOU, LIFANG (4.35) EZECHI, OLIVER CHUKWUJEKWU (3.87) NAVAS-ACIEN, ANA (3.87) LARIN, KIRILL V (3.87) ALCAIDE, MARIA LUISA (3.87)
	GRAY, NATHANAEL SCHIANDER (6.32)
	WILSON, DAVID M (5.30)
	LIN, HENING (4.78)
	WU, HAO (4.27)
	FELDMAN, EVA LUCILLE (4.27)
	WANG, YI (4.27)
	SUH, YOUSIN (4.27)
	CHENG, FEIXIONG (3.76)
	YU, HAIYUAN (3.76)
C2	KARCZMAR, GREGORY S. (3.24)
	XU, XIANGMIN (6.88)
	YEO, EUGENE WEI-MING (5.97)
	REN, BING (5.51)
	MILLER, LEE (5.51)
	GOLSHANI, PEYMAN (3.68)
	CALHOUN, VINCE D (3.68)
	ZHANG, KUN (3.68)
	CHEN, HONG (3.68)
	WANG, LEI (3.23)
C3	XING, YI (3.23)
	ZHANG, RONG (5.86)
	BINDER, ELLEN F (5.86)
	IRIMIA, DANIEL (4.41)
	STEINBACH, WILLIAM J (4.41)
	BATRA, SURINDER K. (4.41)
	MARIUZZA, ROY A (3.92)
	BURNS, JEFFREY MURRAY (3.44)
	SEGRE, DANIEL (3.44)
	DEWHIRST, FLOYD E (3.44)
C4	LI, WEI (3.44)
	ZHANG, RONG (5.86)
	BINDER, ELLEN F (5.86)
	IRIMIA, DANIEL (4.41)
	STEINBACH, WILLIAM J (4.41)
	BATRA, SURINDER K. (4.41)
	MARIUZZA, ROY A (3.92)
	BURNS, JEFFREY MURRAY (3.44)
	SEGRE, DANIEL (3.44)
	DEWHIRST, FLOYD E (3.44)
C5	LI, WEI (3.44)
	ZHANG, RONG (5.86)
	BINDER, ELLEN F (5.86)
	IRIMIA, DANIEL (4.41)
	STEINBACH, WILLIAM J (4.41)
	BATRA, SURINDER K. (4.41)
	MARIUZZA, ROY A (3.92)
	BURNS, JEFFREY MURRAY (3.44)
	SEGRE, DANIEL (3.44)
	DEWHIRST, FLOYD E (3.44)

Cluster	Top Ten PIs (Normalized Degrees)
C6	BOOKHEIMER, SUSAN Y (5.93) BARCH, DEANNA (5.93) VAN ESSEN, DAVID C (5.12) BENOS, PANAGIOTIS V (4.72) BUCKNER, RANDY L (4.32) AMBALAVANAN, NAMASIVAYAM (4.32) SMITH, STEPHEN MARK (3.92) HEWITT, JOHN K. (3.92) DAPRETTO, MIRELLA (3.92) UGURBIL, KAMIL (3.52)
C7	CHUNG, WENDY K (7.21) KIZER, JORGE R (6.19) HOROWITZ, CAROL R (4.15) NEEDHAM, DALE MURRAY (3.64) HOUGH, CATHERINE LEE (3.64) KRITCHEVSKY, STEPHEN B. (3.64) NEWMAN, ANNE B. (3.13) WAPNER, RONALD (3.13) IX, JOACHIM H (3.13) WENG, CHUNHUA (3.13)
C8	POWERS, ALVIN C (8.78) KIM, SEUNG K (5.02) KOENEN, KARESTAN C (5.02) RESSLER, KERRY J. (4.34) THOMPSON, PAUL M (4.34) NEALE, BENJAMIN MICHAEL (4.00) SUNYAEV, SHAMIL (4.00) MACDONALD, PATRICK (3.66) BRISSOVA, MARCELA (3.66) ATKINSON, MARK A. (3.66)
C9	PERICAK-VANCE, MARGARET A. (7.75) HAROUTUNIAN, VAHRAM (5.61) ROUSSOS, PANAGIOTIS (5.61) BLANGERO, JOHN (5.61) SHEPARD, KENNETH L (4.90) ZHANG, BIN (4.54) HAINES, JONATHAN L (4.19) SCHADT, ERIC E (4.19) LOIS, CARLOS (4.19) SESTAN, NENAD (3.47)
C10	KENNY, EIMEAR ELIZABETH (6.52) EICHLER, EVAN (5.28) CLARK, ANDREW G (4.87) MCCARTHY, MARK IAN (4.46) WANG, TING (4.46) GESCHWIND, DANIEL H (4.05) MONTINE, THOMAS J (3.64) LIPTON, RICHARD B. (3.23) FREIMER, NELSON B. (3.23) DABELEA, DANA (3.23)
C11	DEBAUN, MICHAEL R. (7.19) WEISS, MITCHELL J (4.81) SNYDER, MICHAEL P. (4.33) STEIN, LINCOLN D. (3.86) STAMER, W DANIEL (3.86) TRAYANOVA, NATALIA A. (3.86) SEEWALDT, VICTORIA L. (3.86) WU, JOSEPH C. (3.86) KHADEMHSOSSEINI, ALI (3.38) BLOBEL, GERD A (3.38)

Cluster	Top Ten PIs (Normalized Degrees)
C12	LI, DEBIAO (7.05) ZHANG, JIANYI (4.70) LENBURG, MARC ELLIOTT (4.70) LEIN, PAMELA J (4.70) SPIRA, AVRUM E (4.70) ABERLE, DENISE R. (4.23) ORALKAN, OMER (3.76) PAGE, JR., C DAVID (2.82) SHIM, HYUNSUK (2.82) WONG, DAVID T (2.82)
C13	WOODRUFF, PRESCOTT G (5.68) WENZEL, SALLY E (5.68) LEVY, BRUCE D (4.86) HOFFMAN, ERIC ALFRED (4.46) CASTRO, MARIO (4.46) ISRAEL, ELLIOT (4.46) MEYERS, DEBORAH A. (4.46) DENLINGER, LOREN C (4.05) MAUGER, DAVID T. (4.05) COMHAIR, SUZY (4.05)
C14	PLEVRITIS, SYLVIA KATINA (6.06) DE KONING, HARRY J (6.06) MANDELBLATT, JEANNE (5.34) TEMKIN, NANCY R (4.97) KONG, CHUNG YIN (4.61) HAAS, JENNIFER S (3.88) JIANG, XIAOQIAN (3.51) BIAN, JIANG (3.15) REIMAN, ERIC MICHAEL (3.15) DIAZ-ARRASTIA, RAMON (3.15)
C15	ELLISMAN, MARK H (5.62) DICKERSON, BRADFORD C. (5.24) LIANGPUNSAKUL, SUTHAT (5.24) SEUNG, HYUNJUNE SEBASTIAN (4.86) FOROUD, TATIANA M. (4.86) EDEN, URI TZVI (4.48) JOHNSON, STERLING C (3.71) KARN, JONATHAN (3.33) CHEN, WEI (3.33) KRAMER, MARK ALAN (3.33)
C16	FIGUEIREDO, JANE C. (6.76) LE MARCHAND, LOIC (5.16) HAIMAN, CHRISTOPHER ALAN (4.77) NORTH, KARI E. (4.37) CONWELL, DARWIN LEWIS (3.97) ULRICH, CORNELIA M (3.97) BELLIN, MELENA D. (3.97) LI, CHRISTOPHER I (3.57) STEEEN, HANNO (3.57) HART, PHILIP A. (3.57)
C17	LEWIS, JASON S. (6.40) SHAW, DANIEL S (5.35) TERRY, MARY BETH (4.83) GENNARO, MARIA LAURA (4.30) FAYAD, ZAHI A. (3.78) GUO, PEIXUAN (3.78) CANINO, GLORISA J (3.25) MONK, CATHERINE E (3.25) BRITTON, ROBERT A (3.25) ROCKNE, RUSSELL CHRISTIAN (3.25)

Cluster	Top Ten PIs (Normalized Degrees)
C18	DIAMOND, MICHAEL S (8.77) LI, JUN (4.21) FREMONT, DAVED H. (3.20) VAN VOORHIS, WESLEY C (3.20) STAPPENBECK, THADDEUS S (3.20) GARCIA-SASTRE, ADOLFO (2.69) DANTAS, GAUTAM (2.69) XAVIER, RAMNIK J (2.69) PADMANABHAN, VASANTHA (2.69) WANG, YONG (2.19)

Topic Word Scores

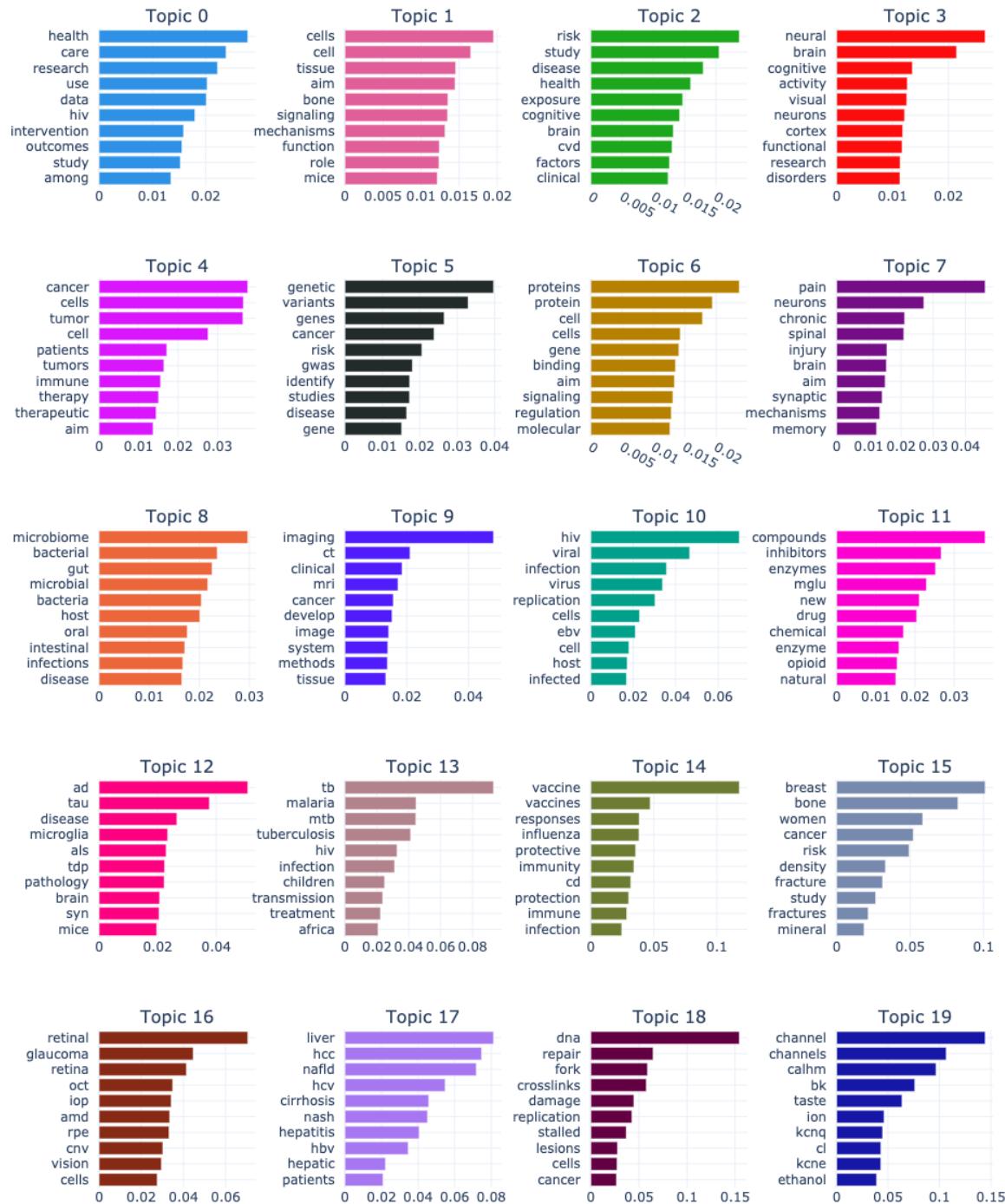


Figure S1: Topic modeling

Similarity Matrix

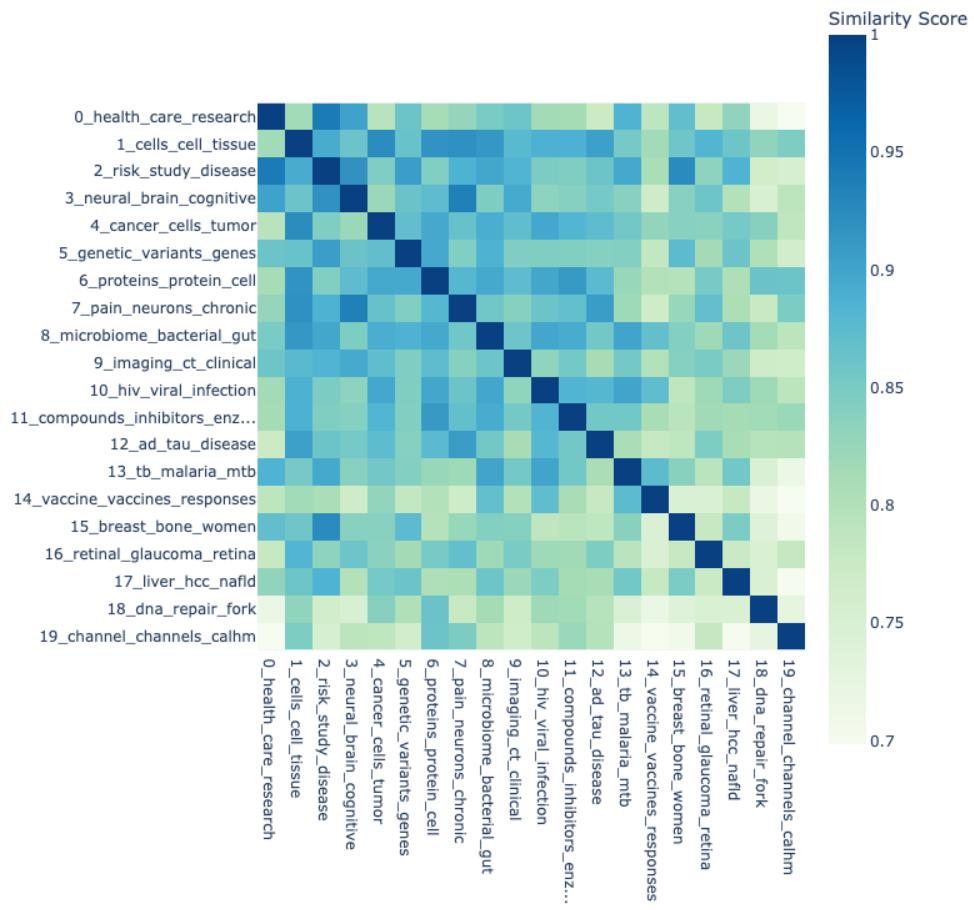


Figure S2: Similarity Matrix

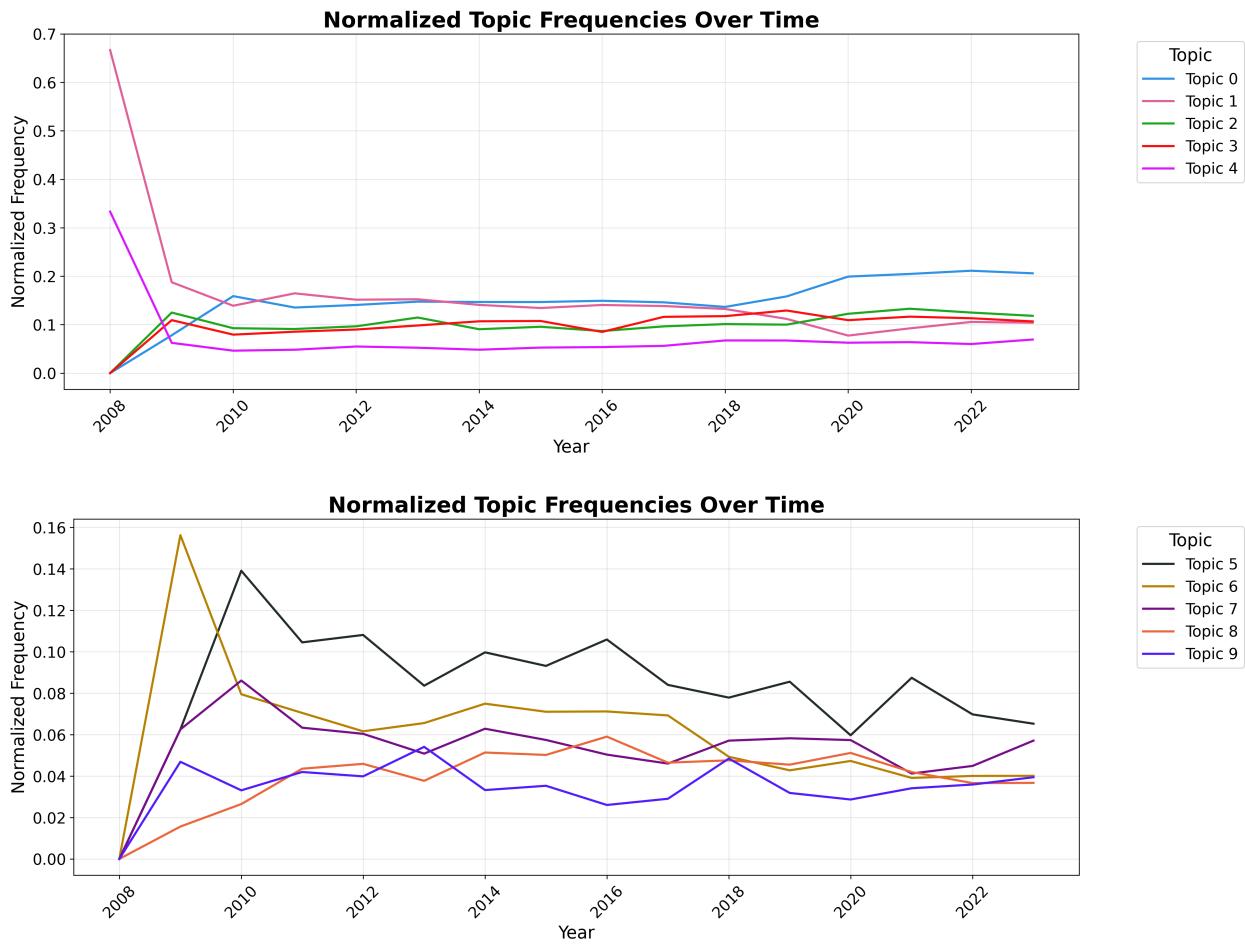


Figure S3: Dynamic Topic Modeling: Topics 0–9

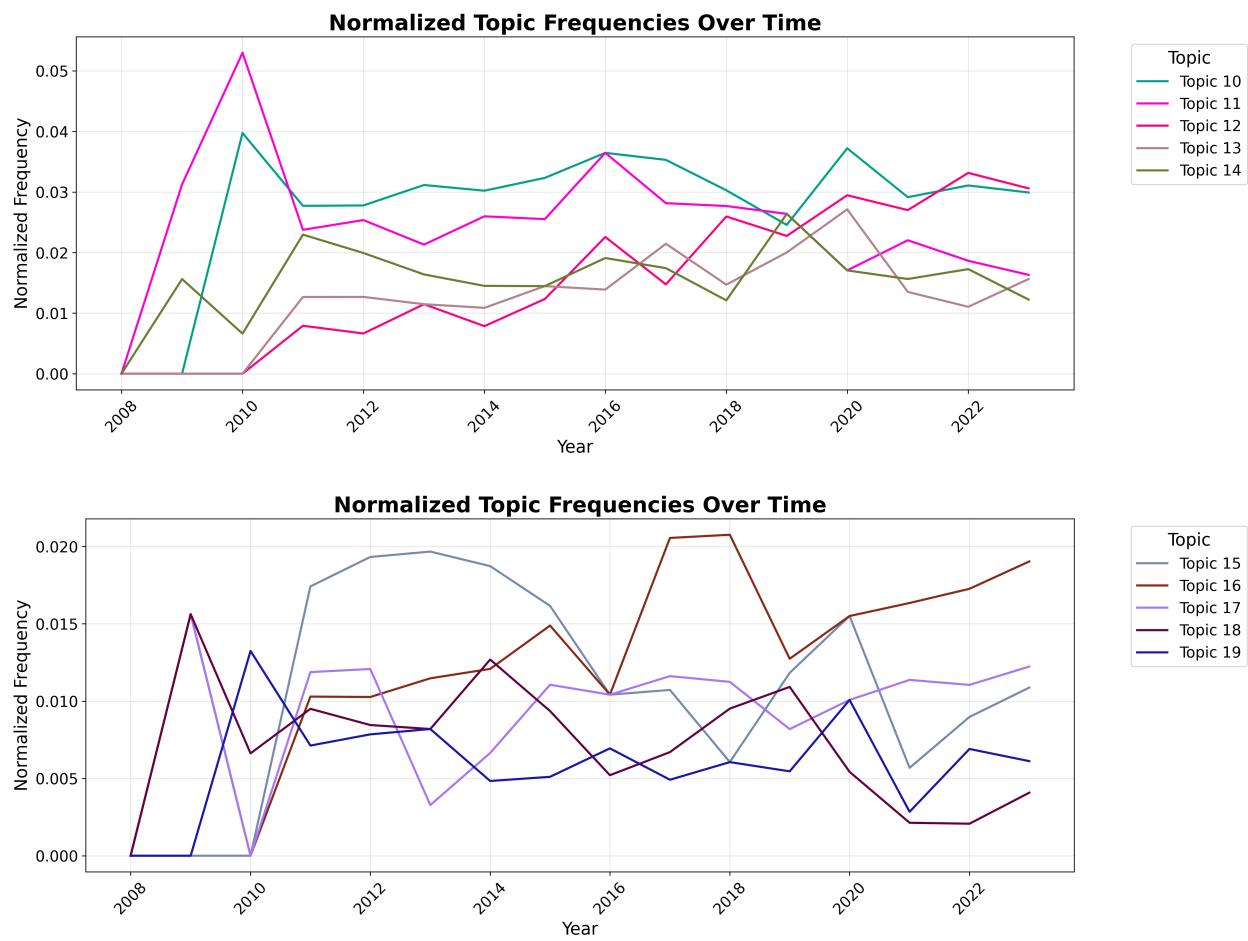


Figure S4: Dynamic Topic Modeling: Topics 10–19