

Index

- academic capitalism 16–17
- academic medicine, *see* career paths of women in academia, embedded case study approach; feminization of medical profession; resistance to women in academic medicine
- academic science, gender equity and equality in 380–81
 - academia as gendered 381–6
 - gender-status conundrum 386
 - overcoming gendered resistance 398–400
 - policy 392–8
 - principles of 396
 - stages and phases of women's advancement and recession in science 386–92
- accountability 19
- achievement mentoring 200–202
- administrators, policies for 75
- ADVANCE program (United States National Science Foundation, NSF) 2, 58, 60–61, 78–9, 387
- African Americans 329, 331–2, 334, 343, 345
- age, and productivity 397
- alternative career models 383–5, 395, 397–8, 400
- analytical mentoring model 200
- angel investors 309
- asexual reproduction 382
- Association for Women in Science (AWIS) 60, 372, 373
- Association of University Technology Managers (AUTM) 362, 364–5, 375–6, 394
- Association of University Technology Managers (AUTM) Women Inventors Committee (WIC) 247, 361–2
- Barriers subcommittee 366–9
 - concluding discussion 375–7
 - efforts to engage AUTM members and other organizations 365–6
 - literature review, patenting and gender 363–4
 - Metrics subcommittee 369–72
 - origins of 363
 - subcommittees 366–75
 - Synergistic Organizations subcommittee 372–5
 - technology transfer 362
- Athena SWAN 8, 10, 11, 128–9, 136–7, 138–9
- automated technologies 363–4
- Baby Boomer Generation, and culture of academic medicine 132–3
- Balance Programme 35–7
- Balance Project (University of Agder, UiA) 36, 37–41
 - conclusions 53–4
 - disjunction between what is needed and what is rewarded 45–7
 - mapping and analysing ruling relations 41–4, 46–7
 - mapping from standpoint of female academics 44–5
 - reproducing or challenging gendered quality regimes? 51–3
 - ruling relations of gender 49–51
 - ruling relations of quality 47–9
- Bayh–Dole Act 348
- Beauvoir, Simone de 109, 119
- benchmarking 19
- biological clock 384
- biomedical research centres (BRCs) 128
- Birkbeck, University of London 2–3, 6, 8–9, 399
- Athena SWAN 8, 10, 11

- TRIGGER project 9–11, 16, 250–51
see also commercialization of research, gender differences in
- business learning networks, *see* learning networks for female entrepreneurs
- business performance and survival rates, and learning network support 186
- capitalism
 academic 16–17
 and feminism 43
- care responsibilities 9, 29, 30, 49, 65–6, 71, 84, 97–8, 120–22, 124, 130–31, 384, 397
- career breaks 384, 397
- career models
 alternative 383–5, 395, 397–8, 400
 ‘masculine’ 50–51, 85, 382, 383, 391, 393, 395, 398
- career paths of women in academia, embedded case study approach 82–3
 analysing life histories from a meso–macro perspective 95–9
 conclusions 99–102
 findings: evidence from triangulation 91–9
 interpreting statistical evidence from a micro–meso perspective 91–5
 research design and sub-unit of analysis selection 87–91
 theoretical framework 83–7
- Carnegie Mellon University, closing computer science gender gap 7–8
- Chief Medical Officer (CMO, UK) 128
- childcare provision 73, 140
- childcare responsibilities 9, 29, 30, 49, 65–6, 71, 84, 97–8, 120–22, 124, 130–31, 384, 397
- Cold War 389
- collaboration, *see* gender and international collaborations in science and technology (S&T)
 community building and policy agenda setting; R&D teams, gender diversity in and impact on external collaboration
 collaborative networks 222–3, 227, 228–9, 230–35
 commercialization
 barriers 366–9
 gender data tracking 369–72
 of patents 354–5
 path to, via STEM fields 331
 commercialization of research, gender differences in 242–3, 333, 336–7
 conclusions 256–7
 findings and discussion 252–5
 organizational context 247–50, 257
 study context and methodology 250–52
 theory and practice 243–50
 women and commercialization 243–7
see also spin-off creation, gender differences in intentions
- commitment to work 48–9
- communication, interpersonal 287, 297
- ‘communities of practice’ 172, 184
- community building, *see* gender and international collaborations in science and technology (S&T)
 community building and policy agenda setting
- competition in academia 2, 3, 24–5, 27, 48, 49
- computer science, gender imbalance in 6–9, 218, 331, 358, 386
- contract types, Italy 101
- copyrighting 336
- culture, as ecosystem component 154, 162–3
- culture of academic medicine 132–3
 culture change 136–40
 psychological perspectives on 133–6
- Davies, Dame Sally 128
- decision-making in groups, and diversity 298
- developmental mentoring approach 191–2
- Diana Project 334
- disciplinary dimension of gender blindness 204, 205
- discrimination, gender 5, 17–18, 119, 122–3, 130, 386, 395

- diversity 283, 297–8, 331
 gender diversity, literature review
 283–6
see also R&D teams, gender
 diversity in and impact on
 external collaboration
- Diversity Project 341
- ‘double presence’ 93, 117
- early career academics
 ‘sticky floor’ 85, 86
 ‘vanish box’ 86, 96, 380, 390–92
- early career academics, gender equality
 and neoliberalism 16–17
 conclusions 31
 current discourses 18
 difficulty in obtaining grants 22–3
 gender differences 27–9
 gender (in)equality in present higher
 education context 17–21
 publication, centrality of 22, 23,
 24–5
 study 21–31
 time pressures 25–7
 types of early career scholars 23, 24
 undervaluation of teaching 23–4
see also junior women in science and
 engineering
- economic inequality 364
- ecosystems approach, *see* networking,
 gender and academia: ecosystems
 approach
- education
 attainment in science and technology
 (S&T), women 215–16, 218
 and entrepreneurship 312, 332–3
 gender (in)equality in present higher
 education context 17–21
 and training, in STEM fields 331–2
- embedded case study approach,
see career paths of women in
 academia, embedded case study
 approach
- engagement mentoring 200–201
- entrepreneurial ecosystem framework
 150–51, 153, 154
- entrepreneurial intention in female
 university students 305–7
 background literature 307–12
 conclusions 319–21, 323
 empirical results 317–19, 320, 321,
 322
 gender differences in entrepreneurial
 intention 307–10
 motivations to start-up new firm
 (empirical results) 320
 obstacles to starting-up new firm
 (empirical results) 317–18, 321
 sample and methodology 313–17
see also spin-off creation, gender
 differences in intentions
- entrepreneurial universities 261, 266
- entrepreneurs, female 3–5; *see also*
 Association of University
 Technology Managers (AUTM)
 Women Inventors Committee
 (WIC); commercialization of
 research, gender differences in;
 entrepreneurial intention in female
 university students; gender, race
 and entrepreneurship in United
 States; learning networks for
 female entrepreneurs; patenting
 in United States, trends and
 determinants of women in
- entrepreneurship
 definition of 328
 and education 312, 332–3
 faculty 338–9
 and gender 3–4, 168, 171, 308, 333–4
 graduate 306, 310
 and knowledge 308–9
 and networks 309, 373
 student 338
 and universities 310, 323, 337–9
- Equal Credit Opportunity Act 339, 341
- excellence, definition of 19, 23, 47,
 48–9
- faculty entrepreneurship 338–9
- family commitments 9, 20, 26, 28–9,
 30, 49, 63–6, 68–71, 84, 93, 96–8,
 120–22, 124, 131, 134
- family-friendly policies 71–4, 87, 140
- female labour market participation 85,
 364
- feminist approaches
 critiques of gender equality agenda
 42–4
 gender and entrepreneurship 3–4

- feminization of medical profession
 - conclusions 123–5
 - female students, current position 112–15, 130
 - health and gender 106–7
 - historical development of 109–13
 - retheorizing sex and gender 107–9
 - TRIGGER project and research at University of Pisa 107, 114, 115–23
- financial motivations for
 - entrepreneurial activity 265, 270–72, 276
- ‘fixing the woman’ 84, 135, 191–2, 384, 399–400
- funding and finance
 - as ecosystem components 152–3, 154
 - for entrepreneurship 5, 267–8, 310, 334–5, 336–7, 339–40, 341, 342–3
 - grants 22–3, 24, 25, 76, 341
- gender
 - ruling relations of 49–53, 54
 - and status 386, 392, 394–5
- gender, race and entrepreneurship in United States
 - closing gender gap 337–42
 - conclusions and further work 343, 345
 - development of intellectual property 335–7
 - education and training in STEM fields 331–2
 - private sector and private–public sector partnerships 340–42
 - recommendations 342–3, 344
 - socio-historical perspective 328–9
 - STEM and entrepreneurship in United States 329–37
 - United States government interventions/initiatives 337–40, 341
- gender and international collaborations
 - in science and technology (S&T) community building and policy agenda setting 215–17
 - background 217–18
 - collaborative productivity stimulus 222–3
 - conclusions 235–7
 - data and methods 226–9
 - findings and discussion 229–35
 - policy issues and agendas 223–6
 - S&T gender research 218, 219, 223–6, 227–8, 229–37
 - theoretical issues 218–22
- gender blindness 204–5
- gender conflict 123
- gender discrimination 5, 17–18, 119, 122–3, 130, 386, 395
- gender diversity, literature review 283–6
- gender diversity in R&D teams, *see* R&D teams, gender diversity in and impact on external collaboration
- gender dominance 287–9, 298–9
- gender equality
 - agenda, feminist critiques of 42–4
 - hope for future 125
 - in Norway 35–6, 37, 38–9, 45
 - ‘stalled revolution’ 1, 381, 393
 - see also* academic science, gender equity and equality in; early career academics, gender equality and neoliberalism
- Gender Equality Action Plans (GEAPs) 192–3
- gender inequality, ‘lean-in feminist’ subject 43
- gender mainstreaming 221, 224, 226
- gender medicine 109–10
- gender roles 30, 121, 122
 - and entrepreneurship 308, 333–4
 - responsibilities (at work) assigned to women 27–9, 46, 49–51, 93–4, 101–2
 - socialization of 83–4, 95–7
- gender stereotypes 395
- gendered evaluation 205–6, 208–9
- gendered identity 206, 207
- gendered societal relations 219–20, 221–2, 225
- GENOVATE@UNINA case study, *see* mentoring relationships, gender perspective in (GENOVATE@UNINA case study)
- ‘gigging’ of academic economy 398–9
- glass ceiling 86–7, 334

- Glass Ceiling Index (GCI) 88–9, 124
 globalization 220, 221–2
 graduate entrepreneurship 306, 310
 grants
 applying for, and gender 24
 difficulty in obtaining, early career academics 22–3
 increasing competition for 25
 issues for junior and senior women 76
 Women in STEM and Entrepreneurship (WISE) Grant Program 341
- higher education, gender (in)equality in present context 17–21
- Higher Education Business and Community Interaction Survey (HEBCI) 250, 251
- hiring committees 381
- household tasks and responsibilities, gender distribution of 9, 93, 96–8, 131
- human capital 244–5, 311
- identity
 early career academics 20–21
 female 109
 gendered 206, 207
 and judgements of others 133
 social 200, 201, 298
 work 134
- identity-fit with organization 133–4
- identity mentoring 200–201, 202–3, 207
- INSPIRE Women Act 340, 341
- institutional ethnography 41–2
- institutionalist perspective 221–2
- institutions, and entrepreneurship 310
- instrumental mentoring approach 191–2
- intention, entrepreneurial, *see* entrepreneurial intention in female university students; spin-off creation, gender differences in intentions
- intentions, psychological theories 263–4, 307–8
- International Journal of Gender and Entrepreneurship (IJGE)* 3
- intersectionality 59–61, 64, 345
- invention disclosure 361, 362
- inventors, female, historical trends (United States) 349–51, 356
- junior women in science and engineering 61, 78, 79
 facing similar issues as senior women 68–71
 mentoring 74–5, 76, 197, 198–9, 202–3
 policies for 71–6
 understanding issues facing 62–8
see also early career academics, gender equality and neoliberalism
- knowledge
 and entrepreneurship 308–9
 production, social organization of 222
- labour market participation, women 85, 364
- 'leaky pipeline' 1, 85, 86, 116–17, 218, 391
- 'lean-in feminist' subject 43
- learning networks for female entrepreneurs 168–9
 conclusions, implications and future considerations 185–7
 impact of structures and processes on sustained engagement 180, 181–2
 networks and female entrepreneurs 169–72
 positive effects of 178–85
 recruitment and formation process 172–7
 studying/data gathering 177–8, 179
- levels of analysis 12, 82, 83–5, 381
- life course approach 82, 85, 383
- male breadwinner model 29, 98
- Manhattan Project 388–9
- 'masculine career model' 50–51, 85, 382, 383, 391, 393, 395, 398
- masculine environments 134
- 'masculinization' of women 124
- Medical Association (Italy) 112–13

- medicine and medical profession,
see career paths of women in
 academia, embedded case study
 approach; feminization of medical
 profession; resistance to women in
 academic medicine
- mentoring 74–5, 76, 342
 Athena SWAN 8, 10, 11
- mentoring relationships, gender
 perspective in (GENOVATE@
 UNINA case study) 189–90,
 192–4
- approaches to mentoring 190–92
 assessment process 199–205
 conclusions 208–10
 gender dimension in programme
 evaluation 205–8, 209, 210
 implementation of programme 195,
 197–9
 rationale for programme 194–5
- Million Women Mentors (MWM) 342
- NASA (National Aeronautics and
 Space Administration) 340
- National Advisory Council on
 Innovation and Entrepreneurship
 (NACIE) 337–8
- National Institute for Health Research
 (NIHR) 128
- National Science Foundation (NSF)
 58, 59–61, 78–9, 389–90
- National Women's Business Council
 (NWBC) 340
- neoliberalism, and feminist critiques
 42–3
- neoliberalism and early career
 academics, *see* early career
 academics, gender equality and
 neoliberalism
- networking, gender and academia:
 ecosystems approach 146–7
 adopting ecosystems approach
 162–3
- background literature 147–50
 barriers to networking 149–50,
 157–8, 161
- benefits of networking 158–9, 161–3
 compliance components 154
 conclusions 163–4
 culture components 154
- data and methods 155–7
 discussion 161–3
 findings 157–61
 future research 165
 gender and networking 148–9
 hard components 151–3
 networks and network structures
 147–8
- role of networking within academic
 ecosystem 159–61
 soft components 153
 theoretical framework 150–54
- networks
 collaborative 222–3, 227, 228–9,
 230–35
 and commercialization of research
 245–6, 247, 253, 254–5, 256–7,
 333
 difficulties for women 67–8, 149–50,
 157–8, 161
 and entrepreneurship 309, 373
 hierarchy and geography 246
 'old boys' network' 87, 169
 and patenting 335–6, 352
 peer support 172
 R&D teams, networking 286–7
 for women 135
see also learning networks for female
 entrepreneurs
- Norway
 Balance Programme 35–7
 gender equality in 35–6, 37, 38–9, 45
 higher education sector 37, 38, 39
see also Balance Project (University
 of Agder, UiA)
- Norwegian Research Council 37
- 'old boys' network' 87, 169
- open innovation (OI), *see* R&D teams,
 gender diversity in and impact on
 external collaboration
- 'organizational fit' 191
- parental leave 74, 131, 140
- part-time working, women 131, 135
- patenting in United States, trends and
 determinants of women in 335–7,
 343, 348–9
 conclusions 358–9
 determinants 352–8

- discipline-based gender differences 353–4
- geographic patterns and future research possibilities 356–8
- international evidence of gender differences 355–6
- patent to commercialization 354–5
- role of networks and experience 352–3
- trends 349–51
- see also* Association of University Technology Managers (AUTM)
- Women Inventors Committee (WIC)
- patents and patenting 248, 249, 251, 252, 254, 289, 335–7, 343
- peer support networks 172
- permanent positions, securing 22–3, 100–102, 383
- ‘pipeline’ model 1, 380, 382, 383, 390, 394
- ‘leaky pipeline’ 1, 85, 86, 116–17, 218, 391
- policy agenda setting, *see* gender and international collaborations in science and technology (S&T)
- community building and policy agenda setting
- policy and regulatory frameworks 154, 163
- Professional Opportunities for Women in Research and Education (POWRE) 58, 62–3, 79
- professors
 - in academic medicine 130
 - career paths of women case study 91, 92–5, 98, 100–102
 - feminization of medical profession case study 116, 117, 118–19
 - retirement 79
 - underrepresentation of women 39–40, 45–6, 189, 194–5, 196, 250, 385
- Promoting Women in Entrepreneurship Act 340, 341
- publication
 - centrality of 22, 23, 24–5, 48
 - languages used 229, 230
 - lower rates for women 7, 222
 - and ‘masculine career model’ 50, 51
 - and policy development 227
 - published scholarship, gender in 3–4
- quality, ruling relations of 47–9, 51–3, 54
- race, and entrepreneurship, *see* gender, race and entrepreneurship in United States
- R&D teams, gender diversity in and impact on external collaboration 282–3
 - conclusions 299–300
 - data and methodology 290–91
 - discussion 296–9
 - findings 291–6
 - hypothesis development 286–9
 - literature review 283–6
 - Spanish context 289
- regional economic development 339
- regulatory frameworks 154, 163
- reputation-oriented motivations for entrepreneurial activity 265, 270–72, 276
- resilience 135
- resistance to women in academic medicine 11–12, 128–9
 - conclusions 137, 140
 - culture change 136–7, 138–40
 - culture of academic medicine 132–3
 - entering academic medicine, work–life balance and leaving 130–32
 - psychological perspectives on culture 133–6
- responsibilities (at work) assigned to women 27–9, 46, 49–51, 93–4, 101–2
- role of scientists, expectations of 84
- ‘saying no’ 43–4, 46, 49–50
- science and engineering, women in 58, 78–80
 - policies for junior women 71–6
 - policies for senior women 73, 76–8
 - similar issues for junior and senior women 68–71
 - supporting 59–61
 - understanding issues facing senior women 61–8

- scientific method 108
- 'scissor effect' 116, 117–18, 194–5, 196
- 'second glass ceiling' 334
- segregation, horizontal and vertical
 - 88–9, 91–3, 194, 195, 196
- self-belief 254
- self-confidence 133–4, 308, 311
- self-efficacy 264, 266–7, 311, 318
- Self Theory 133
- senior women in science and
 - engineering 60–61, 78–80
 - facing similar issues as junior women 68–71
 - mentoring 74–5, 76, 198–9, 202–3
 - policies for 73, 76–8
 - understanding issues facing 61–8
- sense of (not) belonging, women 135
- She Figures 2015* 122, 123–4
- She Figures 2018* 189
- 'shift presence' 93, 117
- Silicon Valley 5, 6, 8
- Small Business Association Microloan Program 342
- social capital 148, 245
- social construction of science 83–4, 85, 204
- social development-oriented
 - motivations for entrepreneurial activity 265, 270–72, 276, 314, 315, 317–18, 333
- social identity 200, 201, 298
- social justice 221
- social sensitivity 287, 298
- social/societal relations 42, 219–20, 221–2, 225
- socialization of gender and gender roles 83–4, 95–7, 122, 363–4
- socio-spatial network analysis 231–5
- Soviet Union 389
- spin-off creation, gender differences in
 - intentions 261–3
 - conclusions 277–8
 - control-related variables 266–7, 273–4, 276
 - discussion 275–6
 - influencing factors 266–8, 274–5
 - intention to create a spin-off (research results) 269–70
 - perceived behavioural control and self-efficacy 266–7
 - previous experience outside academia 266, 272–3, 274, 275–6
 - research method 268–9
 - research results 269–75
 - self-evaluation of capabilities 267–8, 274, 275, 276
 - willingness and motivations 263–5, 270–72, 276
 - see also* commercialization of research, gender differences in
- 'stalled revolution' 1, 381, 393
- Stanford University, closing computer science gender gap 8
- Stanford (University) Latino Entrepreneurship Initiative (SLEI) 342
- status, and gender 386, 392, 394–5
- stereotypes of women 112
- 'sticky floor' 85, 86
- student entrepreneurship 338
- success, styles of 85
- Sustainable Learning Networks in Ireland and Wales (SLNIW), *see* learning networks for female entrepreneurs
- teaching, undervaluation of 23–4
- technology transfer 262, 361–2, 392
- Technology Transfer Offices (TTOs) 247, 337, 339, 357, 362, 363, 365, 368, 369, 370–72, 373–4, 375–6, 392
- tenure clock 65, 68, 69, 73–4, 86, 140, 384, 385, 397
- theory of planned behaviour (TPB) 264, 266, 307
- theory of self-efficacy (TSE) 264, 266
- time dimension of gender blindness 204–5
- time pressures 25–7
- trademarking 336
- training and development, and learning networks 173–4
- transformative capacity 206–7
- transformative mentoring 207, 208–9
- transparency 75, 86, 100
- TRIGGER (Transforming Institutions by Gendering Contents and Gaining Equality in Research)

- project 9–11, 16, 82, 114, 115, 118, 147, 155, 250–51
- ‘triple burden’, women 288
- ‘two career problem’ 63–5, 66–7, 69–70, 71, 74
- ‘two earner family’ model 42
- underrepresentation of women
 - in entrepreneurship 3–4
 - in science and technology (S&T) 216, 217–18, 220, 223–4, 227, 243–4, 285, 289, 331–2, 335
 - in (senior) academia 17, 18–19, 39–40, 45–6, 189, 194–5, 196, 250, 385, 387
- UNINA, *see* mentoring relationships, gender perspective in (GENOVATE@UNINA case study)
- universities
 - athletic programmes, United States 385–6
 - as ecosystem component 151–2
 - entrepreneurial 261, 266
 - and entrepreneurship 310, 323, 337–9
 - introduction of American system 397–8
- university–industry collaboration 339
- University of Agder (UiA), Balance Project, *see* Balance Project (University of Agder, UiA)
- University of Pisa, *see* career paths of women in academia, embedded case study approach; feminization of medical profession
- US Patent and Trademark Office (USPTO) 349, 373
- ‘vanish box’ 86, 96, 380, 390–92
- Vassar College 388
- venture capital funding/industry 5, 342–3
- ‘venture efficacy’ 267–8
- Women in Science and Technology (WIST) 391
- Women in STEM and Entrepreneurship (WISE) Grant Program 341
- Women Inventors Committee (WIC), *see* Association of University Technology Managers (AUTM) Women Inventors Committee (WIC)
- Women Who Code 342
- Women’s Business Ownership Act 339–40, 341
- women’s health 109–10, 364
- work experience 308, 309, 352–3
- work identity 134
- work–life balance 1–2, 20, 25–6, 28–9, 30, 48, 49, 63–6, 68–71, 84, 93, 96, 124, 130–31, 267, 392, 397–8
- workforce representation in science and technology (S&T), women 215, 220–21
- working hours 98–9, 122, 133, 134, 140, 391
- world polity 220, 221–2, 236
- World War II 388–9, 392
- ‘Yentl syndrome’ 110

