

288). In other words, Wang seems to be implying that until we understand why such a thing could happen, we are powerless to prevent it from happening again.

Wang places a good deal of the blame for the situation of the scientists on the Federation of American Scientists (F.A.S.). The F.A.S. did not make a strong enough protest against the postwar anticommunist hysteria and did not attempt to frame the argument against postwar science by defining the issue of loyalty and attempting to determine if someone were a legitimate security risk. Instead, she says, the FAS preferred to focus on "process rather than Cold War ideology and procedural rights rather than fundamental principles of civil liberties. The choice reflected not just fear of repression, but also the constrained political style of liberal anticommunism and the institutional limits of postwar liberalism" (pp. 217-18).

Wang concludes by bringing her argument up to the present and focussing on the historiography of the Cold War period. American science, she says, could use "an infusion of vision. . . . Too many scientists are quick to assign blame for the funding shortfalls to the post-modern critics of science and bemoan the ignorance of the general public rather than look to the historical trends that have brought the physical sciences to their post-Cold War crossroads" (p. 290). Likewise, she warns that historians who have been critical of Cold War anticommunism must now take into account efforts by some members of the historical profession to rehabilitate the era. However, Wang also believes that "historians must be cautious about allowing new revelations to put too high a gloss on America's actions during the Cold War. To conclude that the existence of atomic espionage vindicates many of the abuses committed in the name of anticommunism is to fall into the same trap of reasoning that prevailed during the postwar period" (p. 292).

All in all, *American Science in an Age of Anxiety* is a richly textured book that makes a valuable contribution to the literature of the period and sheds light on a fascinating and disturbing aspect of the Cold War.

National Air and Space Museum  
Smithsonian Institution, Washington, D.C.

Dominick A. Pisano

*Acres of Skin: Human Experiments at Holmesburg Prison, A True Story of Abuse and Exploitation in the Name of Medical Science*, by Allen M. Hornblum. New York, Routledge, 1998. xxii, 320 pp. \$31.95 U.S. (cloth), \$16.00 U.S. (paper).

Historically medicine is the only science that conducts life threatening experiments on human subjects in order to advance its knowledge base in the name of progress. When progress and commercialism coincide the potential for abuse is very great. The outcome of such a coalition for profit is painstakingly detailed in Allen Hornblum's historical exposé of clinical non-therapeutic medical experiments conducted between 1951 and 1974 on the inmates of Holmesburg Prison, Philadelphia County's largest gaol facility. Albert M. Kligman, a biologist and pioneer in dermatology at the University of Pennsylvania School of Medicine established a personally lucrative empire in clinical experimentation that was praised in the press, lauded by colleagues, and supported by university, and

government agencies all of whom also profited generously from the use of poorly informed, uninformed, and marginally paid captive subjects whose mental and physical health was endangered sometimes permanently for the profit of the researchers. At the time of the inception of the experiments, Kligman in his enthusiasm ignored the recently established Nuremberg Code on the conduct of medical experimentation. He successfully argued that the state of research demanded human test subjects. It was clear to Kligman on his first introduction to the Holmesburg prison population that he had found a limitless supply of subjects to exploit: "All I saw before me were acres of skin. It was like a farmer seeing a field for the first time" (p. 37). Kligman was not alone in his cavalier attitude toward institutionalized groups among whom experiments had previously been conducted on retarded children, the insane, and hospitalized patients, as well as prisoners. Holmesburg officials used the experiments as means of social control in the already predatory climate of the prison.

The Holmesburg Prison experiments also reveal the entrepreneurial underpinnings of medicine as a lucrative business with vast revenue potential that can be devoid of concern for increasing health or the quality of life. Prisoners were paid small sums of money to test experimental commercial products as diverse as diet foods, deodorants, detergents, and hair dyes some of which caused illness, lesions, scars, and skin discolourations. Prisoners were also paid small fees to be infected with ringworm, warts, herpes, staph, and other bacteria. Some were exposed to highly dangerous photo-toxic drugs, ultraviolet rays, radioactive isotopes, and chemicals such as dioxin. Major pharmaceutical companies tested new commercial drugs that ranged from tranquilizers, analgesics, and antiseptics, to antibiotics. Inmates experienced side effects and toxic reactions including hallucinations, confusion, disorientation, and delirium. Some subjects were left with permanent memory loss, chronic irritability, and their cognitive performance on tests was impaired.

The government also profited from the cheap supply of human flesh. The United States Army contracted with the prison to test chemical warfare agents, addictive drugs, and pain killers. The Central Intelligence Agency maintained secret programs in brainwashing, hypnosis, electroshock, personality assessment, and mind-controlling drugs. Psychotropic drug reactions were recorded for LSD, mescaline and other behavioural pharmacology thought to be useful in interrogation, covert actions, and paramilitary operations.

Holmesburg was the "largest most varied medical experimental centre in the world" and the largest non-therapeutic human research factory in the United States. Its shocking activities drew little attention or alarm until the 1970s. Jessica Mitford (*Kind and Usual Punishment*, 1973), in the first study of experimental medical research in the United States, drew the analogy between medical prison research and the experiments of the Nazis in World War II. She notes, as does Hornblum, that research such as that conducted at Holmesburg was clearly in violation of the Nuremberg code and Hippocratic Oath. Exposed and shut down after twenty-three years, the experiments were denounced as "shocking and abominable" where human beings were treated as "white rabbits," or "guinea pigs" (p. 66). The research methods were questioned as unprofessional as well as unethical by bioethicists, politicians, and lawyers. Hornblum's in-depth study gives voice to the once silent victims of commercial and governmental medical research. He asks us

to reconsider the ethics of research for specialized or commercial interests in general that overlook the worth of human beings. The abuses of Holmesburg are over but not the scars, and it is far from the only site where captive populations are exploited by unrestrained self-interested researchers, officials, and private companies. This work is written with compassion and makes a significant contribution to social medical history and the history of science through its scholarship as well as through its call for social justice.

*The University of South Florida*

Theresa Richardson

*Running Steel, Running America: Race, Economic Policy, and the Decline of Liberalism*, par Judith Stein. Chapel Hill, North Carolina, University of North Carolina Press, distribué par Scholarly Book Services, 1998. xvi, 410 pp. \$98.95 Cdn (relié), \$32.95 Cdn (broché).

Judith Stein s'attaque aux thèses qui portent sur le déclin, dans la période d'après-guerre, du libéralisme new-dealien. Elle situe l'industrie de l'acier au centre de son ouvrage pour refléter la place que ce secteur de l'économie a occupée dans le contrat social du New Deal, les changements de nature raciale des années 50 et 60 ainsi que les crises économiques et les reconstructions des années 70 et 80. Son objectif est de confronter les politiques sociales et économiques adoptées par l'État et de voir les impacts réciproques qu'elles ont eues sur les entreprises, les syndicats, et les travailleurs. La thèse de l'auteure est clairement exposée: les engagements américains à l'étranger et les politiques économiques de l'État sont au centre du déclin du libéralisme.

Après avoir établi la place prédominante de l'industrie de l'acier aux États-Unis, l'auteure utilise la ville de Birmingham, en Alabama, et ses usines sidérurgiques comme laboratoire d'analyse des changements introduits par le libéralisme de l'époque du New Deal. Sur la question raciale, elle note que l'intervention de l'État s'est articulée autour de deux pôles: le social et l'économique. Les gains réels de la fin de la ségrégation sociale et le début de l'intégration économique étaient marginaux puisque, à la même époque, l'industrie sidérurgique était sur son déclin, un déclin qui réduisait les options offertes aux pauvres des régions rurales déjà refoulés par la crise de l'économie agricole. Stein souligne que la foi des Américains en l'abondance a mené à la conclusion que les problèmes vécus par les Noirs étaient le produit de la discrimination raciale, et non des failles dans les institutions à la base des rapports économiques. Voilà pourquoi, au lieu de refléter la nature changeante de l'économie, les interventions ont mené à l'élargissement de la définition et du sens donnés à la discrimination raciale.

Avec l'arrivée au pouvoir de Richard Nixon, la Maison Blanche montra clairement qu'elle n'était pas là pour s'occuper des récriminations des Noirs devant les tribunaux, laissant aux avocats qui oeuvraient au sein des ministères et agences gouvernementales le soin de mener ce combat. Les avocats et les juges n'avaient pourtant pas le monopole sur les solutions aux problèmes posés par l'application de la section VII de la loi de 1964 sur les droits civiques. Les ententes tripartites (*consent decrees*) entre le gouvernement, le syndicat (*United Steelworkers of*