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Sex Offenders

Sexual violence is a public health problem of enormous proportions that receives grossly inadequate scientific attention. We therefore commend *Science* for publishing Howard Zonana's Policy Forum "The civil commitment of sex offenders" (14 Nov., p. 1248). However, we question some of Zonana's statements about what is scientifically known about sex offenders, For example, he states that the majority of rapists "do not have any mental disorder other than antisocial personality disorder." We find the literature inadequate to support this statement; indeed, it may be incorrect. To our knowledge, there has been no large-scale, systematic study of mental disorders using modern diagnostic criteria and modern diagnostic instruments in a broad range of persons who have committed sexual crimes. Moreover, preliminary research suggests that sex offenders display a wide range of major mental disorders, including paraphilias, mood disorders, and substance use disorders (*1*).

Zonana concludes by saying that "Science should not be the central question but rather whether society can justify a social control scheme for sex offenders." Given our present limited understanding of how to prevent sexual violence, science must remain a central question.

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1. V. B. Galli *et al.*, paper presented at the New Clinical Drug Evaluation Unit (NCDEU) 35th Annual Meeting, Orlando, FL, 31 May to June 1995; S. L. McElroy, unpublished data

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The suggestion that hospitalizing violent sexual predators constitutes "unacceptable medicalization of deviance" is unwarranted. In fact, it is not in accord with the 1988 conclusions of the American Psychiatric Association's (APA's) Council of Psychiatry and Law under the chairmanship of Zonana himself. The council recommended that the continued hospitalization of nonmentallyill personality-disordered individuals, who have recovered from their "mental illness" in a maximum security hospital after acquittal of crime by reason of insanity, is justified on the grounds that "[t]hose who suffer from personality disorders may also benefit from the special management available only in a psychiatric institution where sensitive, comprehensive, unique and imaginative treatment programs can often be developed to assist them in overcoming their destructive behavior" (*1*).

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1. Council of Psychiatry and Law, *Final Report of the Sub-Committee to Review the Insanity Defense* (American Psychiatric Association, Washington, DC, 1988), p. 3.

Response: In response to McElroy and Pope, my point was that the courts are focusing on the scientific questions as a way of resolving legal and political issues. The courts reduce the appropriateness of civil commitment to the "scientific" question of whether experts can make a diagnosis or agree on diagnostic categories.

It is inaccurate to lump all sex offenders under any one diagnostic category. However, the point of noting the high incidence of antisocial personality disorders (9 to 76% reported in studies) in prisons is that this disorder, if taken as a basis for civil commitment to mental hospitals (as is being done with sex offenders), transforms much behavior now deemed "criminal" into a psychiatric problem and thus medicalizes deviance.

The current criteria for antisocial personality disorder are problematic and may account for the wide discrepancy in prevalence studies. Of course, science is central to the exploration of our understanding of sexual violence, impulse control, and its treatment. It should be better funded, and more large-scale studies are vital.

Halpern and O'Connell suggest that the position I took with regard to the civil commitment of sex offenders contradicts the position taken by an APA council report pertinent to insanity acquittees who are not felt to be ready for release. In my view, the context is not comparable.

Insanity acquittees, in response to a criminal charge, elect to raise a defense that establishes the predicate for a special civil commitment scheme and hospitalization. The mental disorders generally have to be of a psychotic nature to qualify for the defense. Under typical not-guilty-by-reason-of-insanity commitment statutes, the acquittee is subject to a release process, supervised by a court or administrative board that puts a primary value on community safety. Thus, even if the acquittee's psychotic mental disorder is in remission, he may not be eligible for release if there is a substantial history of noncompliance with the treatment that maintains the remission. And even if the original disorder is treated, there may be co-morbid disorders, like personality disorders, which, if present, may be taken into account in decision-making about release. This is the context of the report referring to personality disorders. It is a very different model from one trying to deal with the release of convicted felons who have completed their sentences but are still considered dangerous.

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Cancer Therapy and Tumor Physiology

In her Research News article "Systems for identifying new drugs are often faulty" (7 Nov., p. 1041), Trisha Gura describes numerous studies with xenograft models used in drug sensitivity screens that have failed to detect active compounds to take into clinical trials. She hypothesizes that by applying our rapidly accumulating knowledge of the molecular pathways involved in cancer susceptibility and resistance to this problem, a new rational approach will lead to more specific and efficacious drugs. We submit that the failure to identify potent anticancer compounds with xenograft testing does not result from the lack of tumor models that are genetically matched at a given susceptibility locus, or the site of tumor implantation; instead, the problem lies in the microphysiology of the tumor. If test compounds are physically or metabolically impeded from being uniformly distributed throughout the tumor because of temporarily closed blood vessels or decreased proliferation of tumor cells in poorly perfused regions, then no compound will ever achieve its in vitro killing potential in vivo. If one uses an agent, namely, ionizing radiation, which gives the same dose to all cancer cells, xenograft response is well predicted by the level of DNA damage to the cells. This response of xenografted tumors to ionizing radiation is often measured by a clonogenic assay method, where tumors treated in vivo are dissociated into a single-cell suspension and plated for their ability to form a multicellular colony from a single cell. Numerous studies have demonstrated that the ability to control tumor growth is tightly linked with its clonogenic efficiency. This holds true for tumors that die by activating their endogenous pathway for apoptotic cell death (*1*). Ratio-